

**Name**.....Richard B. Gray

**Subject**.....Notes XXIX

**Instructor**.....

**Date**.....

J. L. Hammett Co., Cambridge and Newark



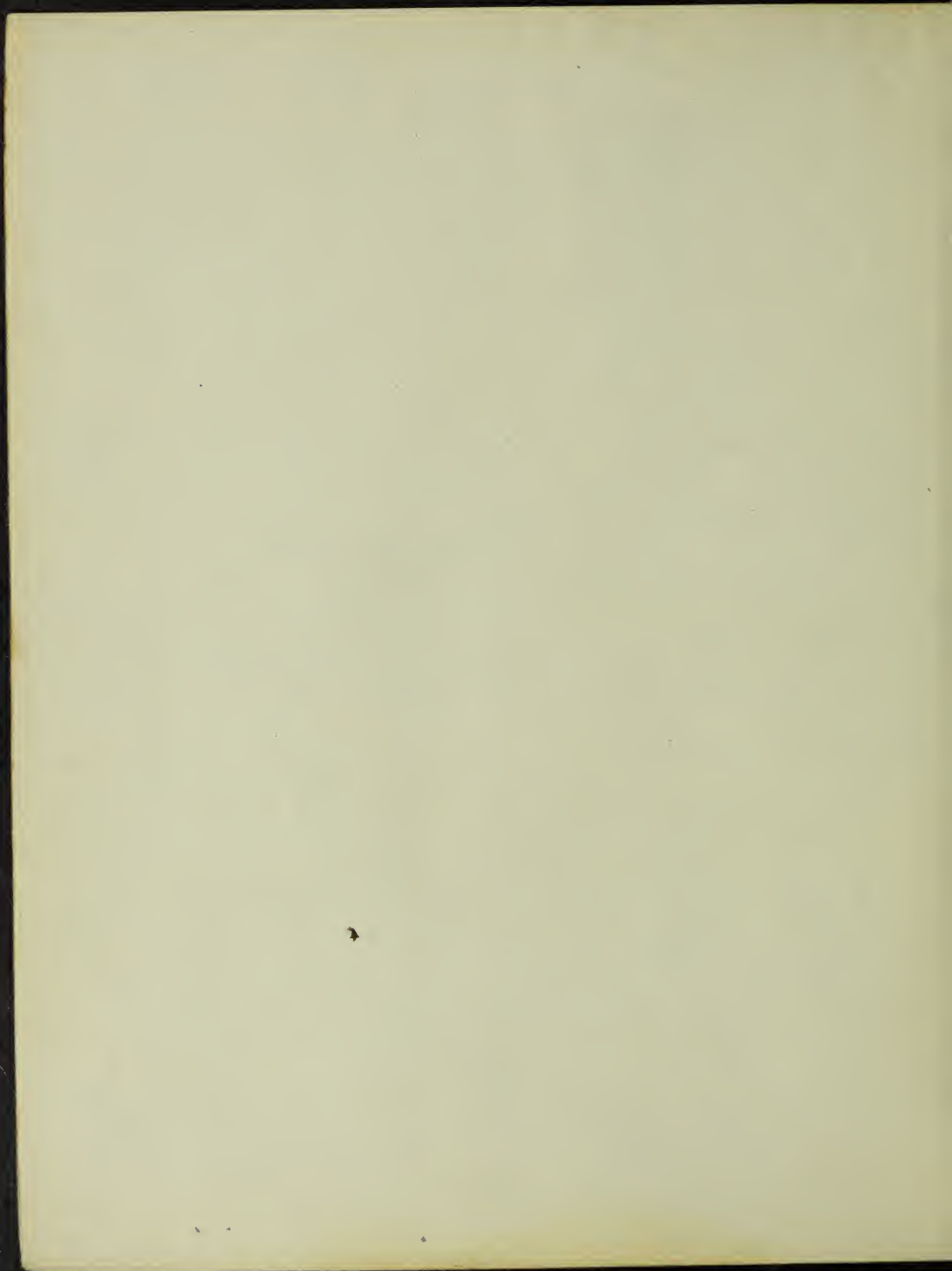
Richard B. Gregg

Eliot St

South Waltham, Mass.  
1

General Hale Book XXIX

Bought April 11, 1937





Cultural & Social

~~"Social & Cultural Dynamics" by  
William A. Sordine, H. Univ.  
3 vols.  
American Book Co. N.Y.~~

May not Boissac's "Exploration of  
the Inner World" suggest some elements  
of the kind of inner re-integration  
and reevaluation that has to be  
effected both in u.v. workers as part  
of their training, and in the  
opponents by reason of the struggle?  
Of whites, mechanism of character forma-  
tion, Duria, etc. May not many  
repetitions of suitable stimuli have  
as deep & powerful & enduring an  
effect as a single tremendous  
upheaval with intense suffering?  
It would seem yes. The u.v. phil-

properly ~~offer~~ <sup>offer</sup> plus religion offers a deep  
<sup>slightly</sup> ideal to form the core of the integra-  
tion.

I must read Postovelli on suffering  
to see how that can be made useful.

The preface to Bdr Siddell Hart's  
"Europe in Crisis" ought to be quoted  
in a footnote of my new book to cite  
the proper mode & also to give  
start for an answer to his doubts.

---

"Math for the Millions" by  
L. Hoggan shows how good ideas  
took a long time to develop, waiting  
till social conditions became such  
that the need was felt and the  
accompanying ideas were understood.

So I think it is now with n.v.r.  
Scientific developments of instruments of

22.11.49

3

war, plus socialization of thought, plus understanding of economic and psychological & political factors now makes n.v.s. possible. I must take advantage of this, & take courage by reason of this example.

To say as Sorlin & Beard et al do that pacifism is nonsense because history proves it never has worked is to say that the diff. & integral calculus, or Cartesian geometry, or theory of relativity, or the steam engine, flying machine, Soviet republic are impossible because they never happened before.

---

~~Books recommended by Hogben~~ ~~Marx's~~  
~~"Practical Mathematics"~~ ~~Bell's~~ ~~"Search for~~  
~~"Path"~~ ~~and~~ ~~D'Ary~~ ~~Thompson's~~  
~~"Growth and Form"~~



Q Quotations from "Mathematics for the Million" by Samuel Haysen, Allen & Unwin, London 1936.

p. 14. "In the ancient world writing and reading were still a mystery and a craft. The plain man could not decipher the blind papyrus in which the wise Ahmes wrote down the laws of measuring things: Civilized societies in the twentieth century have demonstrated the reading and writing of root language. Consequently the plain man can understand scientific ~~language~~ discoveries if they do not involve complicated measurements. He knows something about evolution. The queerly accounts of creation have fallen into ~~disuse~~ discredit. So mysticism has



15.

to take refuge in the atom. The atom is a safe place not because it is small, but because you have to do complicated measurements and use underground channels to find your way there. These underground channels are concealed from the eye of the people because the plain man has not been taught to read and write size language. Three centuries ago, when priests conducted their services in Latin, Protestant reformers founded grammar schools so that people could read the open bible. The time has now come for another Reformation. People must learn to read and write the language of measurement so that they can understand the open bible of modern science. - - -

"Today the lives and happiness

of people depend more than most of us  
realize upon the correct interpretation  
of public statistics, which are kept by  
Government offices. .... The modern  
Ruler has got to learn the language of  
size in self-defense, because no society  
is safe in the hands of its clever people.  
.... Though we may not read or write  
it, we have all learned to talk in  
size language. ....

16. "The first man who dwelt in  
cities were talking animals. The  
man of the machine age is a cal-  
culating animal. We live in a  
world of figures: cooking recipes, railway  
time-tables, unemployment aggregates,  
fines, taxes, war debts, overtime  
schedules, speed-limits, bowling aver-  
ages, betting odds, billiard scores, cal-

oies, balances' weights, clinical tempera-  
 tures, rainfall, hours of sunshine, motor  
 ing records, power indices, gas-meter read-  
 ings, bank rates, freight rates, death  
 rates, discount, interest, lotteries,  
 wave lengths, and tyre pressures.

Every night, when he winds up his  
 watch, the modern man adjusts a scien-  
 tific instrument of a precision and deli-  
 cacy unimaginable to the most care-  
 ning of artificers of Alexandria in its  
 prime. So much is commonplace.

What escapes our notice is that in  
 doing these things we have learned to  
 use devices which presented tremendous  
 difficulties to the most brilliant  
 mathematicians of antiquity. Ratios,  
 limits, accelerations, are not small  
 abstractions, dimly apprehended by



the solitary genius. They are photo-  
graphed upon every page of our exis-  
tence. In the course of the adventure  
upon which we are going to embark  
we shall constantly find that we have  
no difficulty in answering questions  
which tortured the mind of very  
clever mathematicians in ancient  
times. This is not because you and I  
are very clever people. It is because we  
inherit a social culture which has  
suffered the impact of material forces  
foreign to the life of the ancient  
world. The most brilliant intellect  
is a prisoner within its own social  
inheritance.

[Like Zeno's <sup>Achilles</sup> ~~slow~~ + tortoise problem  
as an example.]

17. "You must not imagine that Zeno



12. and all the wise men who argued the point failed to recognize that Achilles really did get past the tortoise. What troubled them was, where is the catch?

.... You know how to translate it into size language, because you inherit a social culture which is separated from theirs by the collapse of two great civilizations and by two great social revolutions. The difficulty of the ancients was not an historical difficulty. It was a mathematical difficulty. They had not evolved a size language into which this problem could be freely translated.

"The Greeks were not accustomed to speed limits and passenger-luggage allowances. They found any problem involving division much more difficult

than a problem involving multiplication. They had no way of doing division to any order of accuracy, because they relied for calculation on the mechanical aid of the counting frame or abacus... they could not do sums on paper. - - -

19. "The immense difficulty which the mathematicians of the ancient world experienced when they dealt with a process of division carried on indefinitely, or with what modern mathematicians call infinite series, limits, transcendental numbers, irrational quantities, and so forth, provides an example of a great social truth borne out by the whole history of human knowledge. Fruitful intellectual activity of the clearest

It is the importance of having with  
the unemployed.

people draw its strength from the common knowledge which all of us share. Beyond a certain point clever people can never transcend the limitations of the social culture they inherit. When clever people guide themselves on their own isolation, we may well wonder whether they are very clever after all. Our studies in mathematics are going to show us that whenever the culture of a people loses contact with the common life of mankind and becomes exclusively the plaything of a leisure class, it is becoming a priestcraft. It is destined to end, as do all priestcrafts, in superstition. To be proud of intellectual isolation from the common life of mankind and to



be disdainful of the great social task of education is as stupid as it is wicked. It is the end of progress in knowledge. .... The mathematicians and the plain man need ~~one~~ another.

20 --- "Without a knowledge of mathematics, the grammar of size and order, we cannot plan the rational society in which there will be leisure for all and poverty for none. .... ~~As matter~~

32. "The techniques of measurement and counting has followed the caravans and galleys of the great trade routes. It has developed very slowly. At least four thousand years intervened between the time when men could calculate <sup>when</sup> the next eclipse would occur and the time when men could calculate how much iron is present



of development of ideas of science

in the man. Between the first recorded observations of electricity produced by friction and the measurement of the attraction of an electrified body two thousand years intervened. Perhaps a longer period separates the knowledge of magnetic iron (or lodestone) and the measurement of magnetic force. Classifying things according to size has been a much harder task than recognizing the different sorts of things there are. It has been more closely related to man's social activities than to his biological equipment. Our eyes and ears can recognize different sorts of things at a great distance. To measure things at a distance, man has had to make new sense organs

for himself, like the astrolabe, the  
telescope, and the microphone. He  
has made scales which reveal differ-  
ences of weight to which our hands  
are quite insensitive. At each stage in  
the evolution of the tools of measure-  
ment man has refined the tools of  
size language. As human in-  
ventiveness has turned from the  
counting of flocks and seasons to  
the building of temples, from the  
building of temples to the steering of  
ships into charter seas, from  
roaming plunder to machines driven  
by the forces of dead matter, new  
languages of iron have sprung up in  
succession. Civilizations have risen  
and fallen. At each stage a  
more primitive, less sophisticated

Language is a tool of  
measurement, of  
communication, of  
control, of power.

culture breaks through the barriers of custom thought, brings fresh rules to the grammar of measurement, leaving within itself the limitation of further growth and the inevitability that it will be superseded in its turn. The history of mathematics is the mirror of civilization.

- - -

26. "Some people will tell you that mathematics did not begin until there was a class with leisure to play with figures and numbers. Later on we shall find abundant evidence for the view that mathematics has advanced when there was real work for the mathematician to do, and that it has stagnated whenever it has become the plaything of a class which is

The development  
of m. & n.



Q isolated from the common life of man-  
kind. Whether this is true or false, it  
is a fact that mathematical brain-  
work, like other kinds of brainwork,  
depends on our biological and cultural  
inheritance, our social and physical  
environment. The Greeks, who were  
the foremost mathematical writers of  
antiquity, lived in a world in which  
they saw people measuring the  
angles between the stars, building  
temples with the aid of diagrams  
traced on the sand, reckoning  
heights by the lengths of shadows,  
designing figures on clay, and making  
tiles. The men who first wrote  
books on mathematics lived in a  
world in which the precisely archi-  
tectural of the Pyramids, magical



games with numbers, Cyprian vases  
 ornamented with geometrical patterns,  
 walls and floors covered with mosaic  
 tiles, were familiar sights. There  
 were merchants counting out coins.  
 There were tax-gatherers exacting tribute  
 by measure. There were craftsmen slaves  
 building with set-square, plumb-  
 line, and water level. There were mar-  
 riners taking their bearings from the  
 Pole star. At best science can only  
 provide man with the opportunity  
 to reflect upon a world whose features  
 are being transformed by those who  
 lack science. (Not quite so. N.B. Science  
 gives <sup>strength</sup> time, to train the mind. The leaders  
 in these developments have had some  
 science & have used their training for the  
 common good, or at least for activities which

slowly developed for the common  
good! ]

"In fact, it is quite wrong to  
imagine that mathematics was in-  
vented by leisurely and idealistic  
Athenians out of sheer fascination  
with its utter uselessness. The  
Babylonians and Egyptians were able  
to obtain results which represent  
no mean order of performance. In the  
art of calculation Babylonian  
technique was far superior to that of  
the other Greeks. . . .

40. "Among living primitive peoples  
the social task of observing the  
passage of the seasons is sometimes  
entrusted to the oldest and wisest  
members of the tribe, or even to a  
single family, who have special

knowledge of the secrets of the heavens. The first remains of settled life in Egypt, Sumaria, and distant Greater Asia witness to this early separation of a priestly caste whose primary social function was to act as custodians of the calendar. It is a great mistake to regard primitive priesthood as exclusively religious in the modern sense. It owed its existence to the economic necessity of recording the passage of time, and if the fulfilment of its task was mixed up with false and fanciful beliefs, it also laid the first foundations of an organized body of scientific knowledge. ---

45. ~~"Civilized"~~

224. ~~"It is often"~~

269. "Archimedes wrote a treatise in which



Q he made an estimate of the number of grains of sand in the world. This was by no means a useless performance in an age when people's ideas of how big things could be were confined by the number of letters ~~the~~ which they had at their disposal. In the Sand Reckoner (287-212 B.C.)

Archimedes hit on two of the most powerful peculiarities which reside in the modern number script. He proposed that all high numbers should be represented by multiples of single powers of ten. He also hit upon the law which underlies the modern calculating device called logarithms. --- Archimedes did not succeed in reforming the number script of his contemporaries, nor in making tables of logarithms by which any multiplication can be



carried through rapidly. Such a change would have meant uprooting the social culture of his time. People were still using the old notation for low numbers. His brilliant failure shows that we cannot afford to let the mass of mankind be uneducated, however much entertainment the average man get from reflecting upon his superiority to the rest of his fellows. An advance like that proposed by Archimedes must arise from a sense of common need. It is not enough that a few isolated men of genius should recognize what is wanted. The mathematician needs the cooperation of the plain man, just as much as the plain man needs the mathematician if he is to enjoy a practical system of wheel-driven transport.

270  
 This is a  
 it will be  
 9/17/3, 49

Q "This Attic alphabet was a milestone about the rules of the Alexandrians. The first stage of the Alexandrian culture was signalized by tremendous achievements in the art of measurement as applied to astronomy and mechanics. It introduced calculation of appalling magnitude to people who used a number script which introduced an entirely new set of symbols at each decimal order.---

[Diophantus c. A.D. 250 and Theon c. A.D. 350]

"Diophantus anticipated the greater part of the algebra of the Hindus and the Arabs. As Hindu mathematics begins about a hundred and fifty years after his death there is reason to suspect that his work became known in the East via Persia." ---

272. "Theon of Alexandria multiplied numbers without the use of the abacus, or at least only using it for the final steps, by means of a multiplication table. ---

277. "Theon's method of arriving at a square root introduces us to a conception which plays a very important part in the modern branch of mathematics called the differential calculus. The method used by Archimedes for getting the value of  $\pi$  illustrates the principle which lies at the root of the integral calculus. The invention of latitude and longitude by Hipparchus and the curves of Apollonius, (c. 250 B.C.) another brilliant Alexandrian, embody the basic conception of the Reformation geometry. Diophantus laid the foundations of algebra. The germs of almost every important advance of the sixteenth and seventeenth



centuries of our own era can be found in the achievements of the Alexandrians. That they <sup>progressed</sup> ~~advanced~~ so far and yet failed to advance further is not explained sufficiently by saying that the Alexandrian civilization participated in the downfall of the Roman Empire. It had reached the limits of further growth within the social culture & which it had inherited. The next great advance came because a less sophisticated people were equipped with a number script which could meet the requirements of Alexandrian mathematics. The essentially novel feature of the Hindu culture was that men who were not advanced mathematicians had invented what the most brilliant mathematicians of

Alexandria had failed to invent, a symbol  
(0) for nothing.

p. 185. "To introduce the next stage in the  
narrative we cannot do better than quote  
Dantzig's admirable book 'Number'. 'This  
long period of nearly five thousand years  
saw the rise and fall of many a civilization,  
each leaving behind it a heritage of litera-  
ture, art, philosophy, and religion. But  
what was the net achievement in the  
field of reckoning, the earliest art practiced  
by man? An inflexible numeration so  
crude as to make progress well-nigh im-  
possible, and a calculating device so lim-  
ited in scope that even elementary calcula-  
tion called for the services of an expert. ---  
Man used these devices for thousands of years  
without making a single worth-while  
improvement in the instrument, without

contributing a single important idea to the system. --- Even when compared with the slow growth of ideas during the dark ages, the history of reasoning presents a peculiar picture of desolate stagnation, when viewed in this light, the achievement of the unknown Hindu, who sometime in the first centuries of our era discovered the principles of position, assumes the proportion of a world event. ---

231.

"Two names which are prominently associated with the beginnings of the University of Alexandria are Aristarchus of Samos (310-250 B.C.) and Archimedes of Syracuse (287-212 B.C.) Aristarchus made the first estimate of the relative distances of the moon and the sun from the earth.



Archimedes, who first showed how we can calculate  $\pi$  as accurately as we need to, was especially concerned with mechanics. Among other important contributions which he made we remember more particularly his principle of the lever and of floating bodies. In demonstrating the ratio of the weight and distance from the fulcrum, Archimedes was not merely indulging Platonic aspirations to spiritual perfection and intellectual refinement. He used his knowledge to design catapults which were used against - and by - the Roman armies. He applied his knowledge of the density ratio to measure the purity of precious metals. The measurement of  $\pi$  went hand in hand with the introduction of machinery based on the use of the wheel. Archimedes helped the launching of a ship by suggesting the use

of course. He invented for irrigation a pump which depends on the rotation of a screw. Very few of us realize the high level of mechanical arts in the Alexandrian world. About 100 B.C. Hero composed a book in which he described the principles of about a hundred mechanical appliances, which included a cyclometer, a theodolite, a double forcing pump, and the first model steam engine. The social culture of the time was using science.

"The substantial links which connected Alexandrian mathematics with the real world is illustrated by the fact that Hipparchus compiled a list of 1,080 fixed stars. Archimedes himself made the first known model in which the rotation of the celestial

sphere and the changing positions of the stars were represented by the motion of a wheel. It is probable that he first used tables of angles like the one given on p. 156 in chapter 4.

Hipparchus, the Alexandrian astronomer, who lived about a hundred years later (c. 150 B.C.), made a table of times, and used it to find the distance of the moon from the earth. By the time when Alexandria became a part of the Roman Empire the distances of the sun and <sup>the</sup> moon from the earth, as also the radii and the circumference of the earth, moon, and sun, had been determined. The circumference of the earth as determined by Eratosthenes (275-194 B.C.) and Poseidonius (c. 100 B.C.) was only about fifty miles out. Hipparchus (in chapter 8) made star maps in latitude and longitude. Marinus of Tyre (c. A.D. 150) began the con-



Q. structure of maps in which lines of terrestrial longitude and latitude are laid down. You can get a very vivid picture of the close connection between the rapid development of astronomy and the practical achievements of navigation and land-surveying during this period by comparing these world pictures in Figs 81-84 A. ....

236 "The theoretical interest of the return to the doctrine of Anaxarchus, and indeed to that of Pythagoras, when Copernicus and Kepler made new discoveries about planetary motion,

459. " Fifteen hundred years earlier the Alexandrian culture had foreshadowed the three great developments in the mathematical awakening which accompanied the rise of the Protestant democracies. The cartography of Ptolemy and the curves of Apollonius embodied the essential features of Cartesian geometry dealt with in the preceding chapter. The mensuration of the circle by Archimedes and Theon's desire for taking square roots anticipated two fundamental operations which will be used in a later chapter on the infinitesimal calculus. Archimedes also stumbled on the principles which underlies logarithms. We shall now turn our attention to the invention of logarithms and the new impetus which it gave to

the study of series. By comparison with such calculations as had been undertaken by the Alexandrian mathematicians the tasks which arose from the expansion of trade and improved techniques in navigation during the fifteenth century made exorbitant demands upon the Rechenmeister, and compelled the search for more compact and less laborious algorithms than those which we ~~shall~~ learn in our childhood from the Arab schoolmasters of Western civilization. The outcome was an immense step forward in the rationalization of arithmetic."

u.V.R.

[ May it be that the destructiveness of modern weapons of warfare may operate to compel adoption of a new sterner mode of settling



conflicts, i.e. n.v.a.? R.R.eg] - - -

284-5 (Re invention of zero and position values for figures by the Hindus) "One reason why the mathematicians of antiquity were unable to accomplish this feat is that they inherited a social culture which forced them to use a number script evolved before the need for elaborate calculations with large numbers was keenly felt. In such a situation advance could only come from a less sophisticated people, who did not begin to write numbers until large numbers were being used freely.

[ Perhaps this is why Gandhi in this age is socializing non-violence. Not till great need is felt because of the scale & destructiveness of modern <sup>violence</sup> has there been a <sup>great</sup> need for this. R.R.eg. ] The volume of world trade expanded considerably during the time of the Roman Empire.

Q A problem which occurs in the Silavati, and is quoted below, illustrates how the first Hindu arithmeticians were preoccupied with problems of taxation, debt, and interest. The difficulty of understanding why it should have been the Hindus who took this step, why it was not taken by the great mathematicians of antiquity, why it should have first been taken by the practical man, is only insuperable if we seek for the explanation of intellectual progress in the genius of a few gifted individuals, instead of in the whole social framework of custom and thought which circumscribes the greatest individual genius. What happened in India about <sup>A.D.</sup> 100 had happened before. Maybe it is

happening now in Soviet Russia. At a  
 certain stage in the history of culture the  
 eruption of a less sophisticated commun-  
 ity proves to be a turning point. History  
 chooses the foolish things of this world to  
 confound the wise, and the weak things  
 to bring to naught the mighty. To  
 the mathematician this essential social  
 truth is not flattering. It is foolishness.  
 To the engineer it is a stumbling block.  
 To accept it is to recognize that every  
 culture contains within itself its own  
 doom, unless it pays as much attention  
 to the education of the mass of mankind  
 as to the education of the exceptionally  
 gifted people. [In relation to war the  
 Hindus are less sophisticated than Europeans.  
 Hence Gandhi makes new invention of Satyagraha.  
 The last point applies to Hindus & Hungarians. (R. S. S.)]



p. 50. "The language in which people describe the different sorts of things there are in the world is vastly more primitive and more conservative than the sign languages which have been multiplied to cope with the increasing precision of man's control over nature. In the world which is open to public inspection, the world of inorganic and organic nature, man was not compelled to enlarge the scope of language to describe any new sorts of phenomena between 2000 BC and the researches of Faraday and White, the founder of Radio. . . .

31. "The language of mathematics differs from that of everyday life, because it is essentially a rationally planned language. The languages of men have no place for private sentiment either of the individual or the nation. They

are international languages like the li-  
nomial nomenclature of natural history." --  
25. --- "healthy people for whom symbols  
are merely the tools of organized social  
experience." ----

p. 45 "Civilized mankind developed written  
symbols for numbers long before the need  
for rapid and simple means of calculation  
arose. In fashioning their number script  
men had no provision of the requirement of  
a script with which simple arithmetical  
performances could be carried out. As  
men were found to deal with larger numbers  
they came to rely upon a physical piece of  
apparatus which circumscribed their whole  
horizon of number and measurement.  
Idolatries make our problems unnecessarily  
elusive by concealing the difficulties which  
bored these mathematicians of antiquity.

① The elasticity of their mental processes was continually cramped by the rigidity of their material equipment. They are given credit for being ingenious by profound when they were merely being unavoidably clumsy. . . .

224. "To say that mathematics is the grammar of science implies that science is concerned with nothing more than enumeration and measurement. The plain fact is that the first task of science is to recognize what different sorts of things there are in the world. It is convenient to conceal this elementary and obvious truth for the simple reason that it helps people to forget that human nature, like external nature, can be studied scientifically. That is ~~scarcely~~ . . . If we go back far enough in history we find that primitive man



probably devoted at least twenty thousand years to the task of recognizing the different sorts of stars in the heavens before it was possible to make measurements of their position and to express ~~the~~ the times of their appearances with numbers. ... Science has its firm foundation in the recognition of what the world is like. Nothing but confusion has resulted, and can result, when mathematics is used before we are quite clear about the sorts of things with which we are dealing and what sorts of measurements it is useful to make. Only then can we decide what sort of mathematics is a useful instrument for increasing knowledge.

224. "The number of combinations of  $n$  things taken  $r$  at a time is

$$\frac{n(n-1)(n-2)\dots(n-r+1)}{r!} \quad \text{or} \quad \frac{n!}{r!(n-r)!}$$

2 The number of permutations of  $n$  things  
taken  $r$  at a time is  $\frac{n!}{(n-r)!}$   
(no logs.)

463 "The same social context which  
demanded quicker methods for calcu-  
lating the position of the stars in the  
heavens called for quicker ways of cal-  
culating the wealth which accumulated  
through voyages which could not  
have been made without the use of  
astronomy to find the ships position  
at sea. One line which led to the  
discovery of logarithms was the  
preparation of tables for calculating  
interest." - - -

606. "The parathyroid gland regulates  
the balance of lime salts between  
the bones and the blood".

The confusions of money are as if we were to assemble a quart measure, a junk cart, a storage warehouse, a national flag, a comptometer, and a refrigerator, make them all look alike, <sup>give</sup> ~~one~~ <sup>one tool name</sup> ~~tools~~ and tell them all ~~tools~~ and without any names to distinguish them or their different functions, and then let those who direct their use in bulk say on any occasion, when some one uses the word tool and is thinking of his particular use to which he always applies this thing, that no this does not mean pushcart it means refrigerator, and if you do not use them as refrigerator you lose all your pushcarts.

Money is one variety of rice can-  
guage.



Re M.V.R. <sup>general principle</sup> (Quote from Encycl. of Relig. & Ethics) Shame is an emotion of self-abasement experienced by one who is conscious of acting contrary to, or below, the standard which he approves and by which he knows others judge him. This sense of self-abasement is stronger than in the related states with which it is often confused - modesty, bashfulness, shyness and coyness. --- But shame involves a sense of unworthiness and de merit. --- The sense of shame consists in the consciousness of failure and exposure before other persons in connexion with a point of honour or of strong self-esteem ... The Doyal has treated shame in terms of the conflict between positive and negative self-feeling. --- In the fraction of self-esteem represented by

success over pretensions shame results when success is inadequate to the pretensions.

--- "Social psychology emphasises the fact that one's social group furnishes the determining influences in forming an individual's standards of taste and conduct. The infringement of the conventions, or mores, is likely to be accompanied by shame. ....

[probably] education and environment are the chief factors.

Re air attacks Col JFC Fuller in the April 1937 Living Age (From English Review) says that "the foundation of all effective physical action is moral stability : ... "When danger threatens, what the people want is the comfort of authority ; Before a calamity occurs a few brief and heartening instructions given in a firm and commanding voice will

do more to alloy pain than anything else.  
--- "Moral damage is the object of an air  
attack". 1. He says <sup>was</sup> discipline & black  
drills etc.

---

I in "The Identity Theory" by  
Blamie Stevens (Sherrill Hughes, Manchester,  
England, 1936) (Strutted by) (Widom)  
he says that the ratio of space to time  
movements is the velocity of light,  
300,000 kilometers, or a thousand million  
feet, per second. "The idea of putting  
300,000 kilometers alongside of one second  
and saying that they are equal is uncon-  
genious. That is one good reason why  
we have so long been in ignorance of  
this equality. The philosopher will  
now ask why the distance is so long  
and the time so short. It is because



we have not said in which direction the 300,000 kilometers is to be measured. ---

- (13) "The distinction between past and future time is an instinct inculcated in us by evolution, to satisfy our necessities. The animal's most important affair is the continuity of its life, so long as this is useful to the maximum prosperity of its progeny. Therefore its vital concern is for the future, and not for the past."

"In precise terms the theory states that matter, time and space are each complete, symmetrical primals, for measuring the same thing, which we call substance."

Mrs. Huxley's theory of the inconsistency & violence in the Gita is that after the reign of Arjuna (about 325 B.C.) there were invasions of India from the N.W.

and at the time of the composition of the *Opita*, about 100 A.D., <sup>the command to use</sup> violence was put in the mouth of the god Krishna in order to offset Acoba's teaching & make possible a "defence" of India against the invaders. After all, Acoba's pacifism was a refraining from conquest rather than a defence against conquest. The technique of n.v. resistance had not yet been evolved.

---

One of Miss Henry's students raised the q. whether n.v. on a mass scale did not require too much courage, unselfishness & self-sacrifice of parents & relatives as well as of the n.v. troops. No, because its growth & use would have proved that the losses & sufferings under

it are less than those of violent war. Hence  
 the likelihood of <sup>individual</sup> ~~any~~ person being killed are  
 less, hence not so much courage needed.  
 Also, because this is more sincere, is really  
 dying for an ideal and not killing for an  
 ideal while pretending to die for it (as  
 the false talk by militants goes), the  
 heroism is greater & a cause for tears  
 and pride on part of parents & children.  
 Also the true believer in L.V.R. would  
 know that his endurance of suffering is  
 itself immediately effective in the moral  
 realm in winning central support &  
 in undermining the opponents morale.  
 So his time in jail, his losses, his suffer-  
 ing, or his death are immediately effective.  
 His knowledge of conviction of that makes  
 all these much easier to endure than the  
 waiting under fire, the days in hospital or



in prison which the violent soldier  
undergoes. To the soldier those times  
seem wasted & lost, or at best only  
preparation for a period of effective  
activity later. But ~~these are~~ for the  
n.v. soldier those times are themselves  
periods of the most effective activity.

What is needed is not more courage,  
but a courage having a <sup>morally</sup> <sup>more constant</sup> clearer, clearer,  
sincerer basis, one grounded in a  
truer and more comprehensive psychol-  
ogy, <sup>related to a wider environment in</sup> morality and religion, <sup>space & time &</sup> <sup>density</sup> <sup>more inward & more spiritual</sup>.

Miss Hussey says that in Vincent  
Smith's Oxford History of India, 1st  
edition, p. 21, 24 there is a description of  
how an early Indian ruler in the  
Punjab, Ambhi by name, used n.v.s.  
against Alexander of Greece.

Did not Chiang Kai-shek use his wife  
 use N.V.R. against the rebel general recently?

Perhaps N.V.R. is now coming to its  
 own because of the vastly increased <sup>social</sup> need  
 for it now due to (1) the fact that for  
 the first time in world history all the  
 different cultures are in close and constant  
 contact with each other, making  
 very widespread and intense and deep  
 conflicts, (2) the defects and failures  
 of capitalism are now causing so much  
~~more~~ suffering and conflict than before  
 because the population of the world  
 is larger than ever before, (3) science  
 & technology have speeded up social  
 change faster than ever before, thereby  
 causing more conflict, (4) science and  
 technology have increased the deadlines

Apr 3, 21  
 supra  
 of also my letter  
 to Holmes.

and danger of modern instruments of war to a degree never before known, imperilling the civilization of half the world's population. Just as the germ ideas of logarithms did not develop until the advances in astronomy, navigation, ~~and~~ trade & finance had created a strong social & economic need for a more efficient method of handling large numbers, so the seminal ideas of Buddha, Mahavira, Lao Tzu and Jesus could not develop until now when the need for a safer mode of solving group conflict is a social necessity.

The problem of anger & fear is a part of the adjustment of the organism to its environment. The adjustment



must be inner before it can be outer. This holds true of the muscles & chemistry of the organism as well as of emotions & thoughts. As thought can change more rapidly even than emotion, or complex chemical reactions, the thought of the individual and of the mass are the first things to be attended. Understanding how in theory & v. v. can work is the first step; then how to make the inner changes, organization & education & training for masses, etc. Settling all honest objections & doubts is part of the intellectual preparation. Also relating it to all possible similar concepts, to enable its handling & apprehension & mastery. Also development of all implications in every field. The deepest adjustment is to God & the spirit. God

Is the nervous system too gross to handle the subconscious & also into the glandular system?

is a principle of inner and outer organization or integration. When I get angry it means I have not <sup>even</sup> adjusted myself quickly enough, have not seen or accepted <sup>all</sup> the facts and been mobile myself. This idea came by reflecting on the irritation I felt at a bicyclist rider in the street. I should have just treated him as a 10' ft-wide motor car, given him the needed leeway and acted accordingly. Instead, I thought about his recklessness & the need for a town ordinance, etc., all that was blaming him, making him the scape-goat for my own intellectual and moral failure.

---

Send money pamphlet when it is done, to Kinsolving, Richard

to read, Paul Funnas, Prof Irving Fisher,  
 Alan B, A. J, H H Perry, Gerald Hand,  
 Jim Keegan

In Evelyn Underhill's - "The  
 Spiritual Life" 3 radio talks 1933,  
 Hodder & Stoughton, London she  
 recommends for reading on it Père  
 J.N. Grou - "The Hidden Life of the Soul"  
 and "The School of Jesus Christ";  
 The Spiritual Letters of Fénelon and  
 Baron von Hügel's - "The Life of Prayer";  
 and "Letters to a Niece". One of the  
 greatest books ever written she says is  
 Dr. Causade's "Abandonment to Divine  
 Providence" - trans. / St Augustine's  
 Confessions and Prof. Allison Peier's  
 translations of the works of St John of the Cross.



"The Early Buddhist Theory of Human Perfection"  
- Holmes. London

Pain at first aids diagnosis. If ~~greatly~~ prolonged it may greatly weaken the patient. Some characters are spoiled under it, some ennobled.

Pain disturbs digestion, (both the chemical and muscular parts), causes secretion of and discharge of adrenalin, glycogenin, hastens blood coagulation, thus to action where action is useful, takes blood from the abdominal organs and puts it into <sup>heart, lungs and brain,</sup> skeletal muscles, by action on walls of blood vessels; overcomes fatigue, - W. B. Cannon. All these have survival value. Consider these in relation to voluntary suffering of N.V.

---

A great many people believe that if a movement of deep social reform is to get anywhere in this country it must be linked with and taken up by the labor movement and farmers. E.g. Cooperatives, peace, socialism, etc. That is usually interpreted as meaning that it must have an economic basis or support. Most people's idea of a revolution is a sudden surge and that after that the daily work and routine goes on again with a new flavor and rearrangement but otherwise, presumably, much as before. That is, they do not visualize the <sup>detailed</sup> changes that would be made in their routine, their lives and actions as well as in their thoughts.

I think that deep social reforms are

not that sudden, but are ~~the~~ organic  
growths with their own organic  
rate of change, a speed which seems  
slow (usually) in relation to the life  
of an individual. <sup>Takes 3 generations</sup> Also I do not think  
that such a reform needs to be linked  
up formally with the trade union  
organizations or farmers unions provided  
it is something which does definitely  
and directly affect the work and  
modes of living of the people who engage in  
it and others. <sup>and after there have been upset this war.</sup> Machinery, mathematics,  
transportation, communication, printing,  
money, etc have all done that.

So with ~~me~~ K and my proposals  
for peace training.

---

As you grow more spiritual  
you come to be with more sensitive



people. Hence if you feel or think angry or bitter thoughts, they sense it immediately and you get a quick punishment (reaction) by their freezing. E.g. my resentment vs. Dulles at P.H. had its comeback 9 months later in a sense of depression. I need more self-control & love & humility.

Spiritual laws are constantly at work. My good or bad fortune and most of my feelings come entirely from myself. This is true of other qualities and attitudes besides anger. As soon as I learn spiritual laws and obey or follow them myself, I can use immense spiritual power, just as when I learn physical and chemical laws & follow them carefully I can do what has been shown by science and technology.

---

Self-confidence comes from skill, among other things.

Book of Society. Mystical sense of being a member of a cult mentioned in BH Siddell's/Huts "Europe in Arms", in the days on military training.

The money, have certain kinds of trust limited to the community, out of which such trust really grows, & not usable by private persons for private purposes. Much of what is now called capital for production would fall into this class.

For work camp libraries  
Sent you's list. Huxley's pamphlet

(Hargers), Howell Hart's book, Hayland's 3 books, Cuy Haven, Peace with Honor, B. Russell's Which Way to Peace, R. Selig pamphlet.

To gain unity with people and Self, we must completely integrate ourselves with all other life and the world, just as a blood cell is integrated chemically and by nerve controls & physically with all other parts of the body. It is not a denial of self but a creation of unity because of and in spite of and <sup>(of Hegel's den. of the)</sup> behind the diversity. Should be a richer unity because of the diversity. The integration growth must precede the denial of selfishness and supplant that selfishness. If the ~~former~~ integration is not deep and thorough, the ego fights back and takes its revenge.



J. B. Steers' German <sup>Kindred</sup> psychologist on that.  
Service of the poor is such integration.

If I want God I want him in  
people - all people. If I want to  
find him, I want to find him in  
people. If I love God, I must love  
people. If I believe in God, I must  
trust people. If I want to grow Godward  
I must grow toward people (love).  
For man is made in God's image, & God  
dwells in <sup>each</sup> man.

It is easy to forgive injuries if you  
really believe that the essence of  
yourself is the eternal spirit and the  
other things are less real & not  
essential. Harm to them does not  
really count.

Just as our arithmetical symbols are  
 worked out on the base of 10, as are  
 also ordinary tables of logs, so may not  
 money be considered a size language  
 worked out to the base gold, along  
 with another to the base managed cred-  
it and managed currency, (or the base  
 banking control). So my money pro-  
 posals do not make a different kind of  
 symbol or tool but give it different  
 bases for different purposes. Circula-  
 tion (medium of exchange) money to  
 be worked out in definite ratio to  
 population, production rate & standard  
 of living. By separating credit  
 used for capital expenditures we  
 remove the common man from danger  
 & probably end the usual business  
 cycle of depressions.

# Doctors Detect Start of Life by Electricity

*Boston Transcript*

Harvard Scientists Tell  
Convention of Ovulation

Experiments  
April 23, 1937

(Copyright 1937, by Science Service)

MEMPHIS, April 23 — Life's very beginning can now be detected electrically, it appears, from research reported by Drs. J. Reboul, H. B. Friedgood and Hallowell Davis of Harvard Medical School, at the meeting here of the Federation of American Societies for Experimental Biology.

## Cure for Epilepsy

Epileptic attacks might be prevented if the patient's breathing could be regulated to an even rate of inhaling and exhaling, Dr. Frederic A. Gibbs of Harvard Medical School reported.

This is because the stop and go system which regulates the breathing movements also affects the rate of brain cell activity, Dr. Gibbs explained. The brain cell activity generates rhythmical electrical waves, popularly called brain waves. A record of these brain waves is, except for the time scale, very much like the record of breathing movements. When breathing is slow, the brain waves are slowed, and the reverse.

Measures which correct disturbances of the breathing rate tend to correct and prevent the comparable disturbances in brain wave frequency which occur in epilepsy, Dr. Gibbs said. Conditions which cause sudden changes in breathing rate because of their effect on brain wave frequency bring on epileptic seizures.

PNEUMONIA

Evelyn Underhill in  
her "The Spiritual Life"  
compares our life in the  
body & the spirit to  
ambitious life. She  
126-7 "How are we to  
know, or find out, what  
the Will of God is? I do not  
think that any general an-  
swer can be given to this.  
In a clear moral or political  
issue, we must surely  
judge and act by the great  
truths and demands of  
Christianity; and if we have  
the pluck to do this, then, as  
we act, more and more we  
shall perceive the direction  
of the Will. That



choice, care, or action, which is least tainted by self-interest, which makes for the increase of happiness - health - beauty - peace - cleanness and harmony of life, must always be in accordance with the Will of the Spirit which is drawing life towards perfection. The difficulty comes when there is a conflict of loyalties, or a choice between two apparent goods: "then wait in quietness. If no guidance or promise comes" then our conduct should be decided by charity and common sense."

Feeling anger or resentment is largely an inner stress because of a conflict between one's ~~inner~~ deep subconscious sense of unity and one's superficial, intellectual egoistic attitude. It is a measure of that divorce

between the conscious and subconscious self,  
between the self and the Self. In this  
connection Freud's idea of the ego being the  
primitive consciousness and Schmitt's  
idea of primitive mind differ. Which is  
correct?

Ruskin defined "riches" as "the  
maximum inequality in one's own favour,"

Siddell Hart claims that v.v.s.  
works only when both opponents have the  
same moral ideas. But it may be only  
because the morals of the violent party  
are self-inconsistent as is true of all  
European cultures. But probably  
anthropological studies like M. Mead  
would show that all cultures are  
intrinsically inconsistent. If so, all

65

But the European is more so than the  
others  
would be liable to crumple under N.V.R.

Again, NVR in working against  
English and Dutch soldiers is working  
against those whose morale and dis-  
cipline is perhaps highest in all military  
history, as shown by Hart's own chapter  
on discipline in his "Europe in Arms".

If <sup>NVR</sup> it cracks such strong discipline, it  
ought to affect any other type of discipline.  
The incourtenances would yield less  
easily in NVR than in most nations,  
partly because of the intensity, depth  
strength and duration of their dis-  
cipline, also because they are more  
successful than most in hiding their  
incourtenances in their subconsciousness.

If you say it won't work vs  
Nazis because they are sadists & means,  
<sup>and then</sup> that, is disproved by fact that NVR



does work as image people.

~~The case of~~

Perhaps not only is imagination  
the secret of will but also we must  
have an inner or visual picture of a  
pattern of action (of India) for the  
immediate present. Perhaps my  
book & pamphlet in explaining <sup>the</sup> ~~the~~  
& its modes are stimulating & giving  
food for people's imaginations, &  
thus helping their wills. They  
must not only <sup>understand</sup> ~~see~~ & approve the  
theory, they must also begin to change  
their ways, a much slower process.  
They must see it in terms of their  
own experience, as growing naturally out  
of and meeting their daily work &  
lives.

Correlate imagination and faith,  
 especially <sup>creative</sup> imagination as conceived by Kant,  
 Coleridge, Blake, Wordsworth. Imagination  
 like faith can move mountains.

J.M. Mc Kinney considers emotion as  
 a form of energy. From "Emotion and  
 Bodily Changes: a survey of literature  
 on psychosomatic interrelationships 1910-33  
 by H. Flanders Dunbar, Columbia U. Press  
 op 16-17. <sup>summarizing</sup> Quoting a paper by K.S. Dackley  
 "Extirpation tests show that the role of  
 learning and memory are alike functions  
 not of individual cells but of the total  
 mass of tissue. Further, lesions may  
 destroy complex habits, leaving simple  
 habits, even of the same kind, untouched.  
 And 'in monkeys and probably in man,  
 the severity of cerebral ~~path~~ paralysis

varies somewhat with the current emo-  
tional state, and during great ex-  
citement the power of voluntary move-  
ment may be temporarily reduced. ...  
The emotional facilitation can reduce  
the capacity for movement. This looks  
as though it were energy that is lost.  
In clinical assessments, the groups lost  
are determined not by associations, but  
by 'ways of thinking about things',  
for example, perhaps the object-name  
relation, or the spatio-temporal relations.  
Thus the units for cerebral function  
seem to be 'modes of organization' and  
the cortex seems to provide a sort of  
generalized framework into which  
single reactions conform spontaneously,  
as the words fall into the grammatical  
form of a language.

Comments



From the discontent known to exist in Italy, Germany & Russia it may well be that nowadays, with the development of rapid transport, mail, printing press, radio & films & machine technology, social integration and thinking have been so much enhanced and social change so speeded up that dictatorships are no longer possible for over a generation or perhaps two. Liberty must come if people insist on modern technology. Hence violence is on the wave.

Many many proposals are not like reformed spelling, - only a matter of convenience for some people. It probably would not be adopted <sup>widely</sup> till a big depression, but after that it could be retained everywhere. The 28 changes for weekly script could

come out of the <sup>form of</sup> ~~mind~~ money

---

One reason, perhaps, why imagination is more powerful than will is that it organizes & synthesizes experience & its meanings & places oneself in relation to the larger pattern, thus achieving that identification of the self with the purpose which Aveling says is the critical element in willing. Cf. D. G. James "Scepticism & Poetry", Allen & Unwin, 1937.

---

Perhaps the training pamphlet, though not a pattern for all of the econ. & social life, may be very largely such for the n.v. 'troops'.

How may we train and discipline the imagination? Drama is one way. <sup>Whole book is another.</sup> Poetry another. <sup>Work of</sup> creation is another. <sup>poetical</sup> If my book on <sup>poetical</sup> fiction may to some be a ~~poet~~ training of the ordering & synthetic element in imagination. Have with it a course in aesthetic design (line, form & color); also one in ~~music~~ <sup>imaging</sup> instrumental music, & harmony; one in folk dancing; anthropology & in M. Mead & R. Benedict to get an idea of social ordering & pattern. One on analytical geometry, for practice in shifting frames of reference. Something on symbolism, related to religion & art. Money, symbol & economic order. Of Read also Parly's Giddman's Interpret of History. Then Emerson, Looking Backward, Marx, H. George, & Beard's last book, Power of M.V.



Let me get my self-respect from  
my relation to God, my inner reconciliation  
& integration of my impulses, <sup>+ drives,</sup> and my own  
awareness of <sup>to</sup> stance and attitude and  
relations with men and Nature. Don't  
depend on what people do or say to me.  
My relations with people depend on what  
I do chiefly. Partly on what I say and  
my manner.

The war talent & intensity may  
be like some cases of hysterical paral-  
ysis. The patient of that kind  
though bed-ridden for 40 years,  
has been known to leap out of  
bed and run fast when the  
house catches fire. So perhaps  
the next war may ~~affect~~ give  
life to the dormant possibilities

of human limit & cooperation.

---

If as Duria says, the secret of will power (shown of accomplishment) is to supply stimuli to the detailed steps of the entire act in a regular order & pattern, and also that symbols & tools organize as well as stimulate action, then the reform of money ought to be a great step forward in reorganizing our economic life & making it consistent with unity. It will help all social relationships too, for they are very largely conditioned by ec. elements & forces as shown by Vollen, Marx & Tawney, Beard et al.

But pending that general reform of money the individual pacifist & his teams should change their attitude toward money & change their mode of life & of work in

a way that will help release them  
from the <sup>psychological & moral</sup> bonds of money. It and  
re-direction of imagination will both  
help.

---

~~Not~~ Training for N.V.R. must  
give much <sup>happiness</sup> pleasure & deep satisfaction  
a <sup>condition</sup> that people will not give it up, even  
in face of total. Imagination  
should help to do this.

---

One of the difficulties in reform is that  
most people want both to have their cake  
& eat it, they want to have mutually  
inconsistent worlds at the same time  
& are reluctant to give up their habits  
even tho intellectually they see that  
new habits will make trouble. So  
we must find a way of making the



new & concerted reform scheme seem more attractive, & also provide satisfying steps toward it, such that seem to grow out of people's own experience & is put in familiar terminology & with familiar analogies the first part of which are families.

---

Siddell Hart is not correct in thinking that W.N. require high discipline from the entire population. It will, like war, require <sup>partial</sup> understanding & strong faith from ~~the~~ most of the population. The airplane & bombing may call for more discipline among civilians than the military system ~~has~~ is able to produce, & if it does ~~the~~ militarism will buckle down. In any event no more discipline as distinguished from understanding & faith will be needed by

?  
 from  
 China?  
 not few  
 mentioning  
 gas.

civilians in NVA than in war.

---

Re trying to worship both God & manna and whether we nowadays do worship money, look up title "Worship" in Enycl. of Ethics & Religion, also Enycl. Underhill on Worship. We certainly respect money & recognize it has very great power & value. The medieval man worshipped his king not because the king comprised the whole meaning of life or was the sole power. The vassal might recognize that a lord had some power, & that sometimes this lord's power was more effective over him than the king's more distant tho greater power. Or perhaps there was a hostile king, or a lord whose power was

nearly as great as that of the ~~human~~ thing. So the mere fact that money is not  
 all in all nor the role power in our  
 lives does not prevent us from worship-  
 ing it. In so far as worship requires  
 contemplation, <sup>and meditation</sup> we certainly contemplate  
 many aspects of money, and give much  
 time thereto. Insofar as the <sup>meaning of worship is that the</sup> object of  
 worship inspires, <sup>guides</sup> & controls most of our  
 political, social & economic activities,  
 we worship money. Worship need not  
 require ~~any~~ reverence for moral goodness,  
 as shown in case of early Hebrews &  
 Jahweh, also the Greeks & their gods.  
 We accord the creative power to money &  
 are in some sense of that quality.

In describing M.V.R. so far, I have  
 used chiefly ~~the~~ military <sup>analogy</sup> metaphors so  
 political



Also are metaphors of existing various kinds of unity,  
of already a significant form.

as to explain the meaning & implications  
of such a mode of conflict resolution.  
& suggest "the inner vital quality".  
To explain the constructive role of  
N.V.R. I might use the ex. productive  
processes (both hand & machine) also  
the artistic creative processes (painting,  
sculpture, architecture, music) as a  
metaphor to explain the meaning &  
implications there. In all these  
instances I would be using something  
familiar - one term of the metaphor.

All this might constitute a  
large section of my next book, or  
indeed a book in itself. It would  
stimulate people's imagination, reassure  
them as to the future of a N.V. world,  
and comply with T.N. Whitehead's  
suggestion of the ~~the~~ best criterion  
of pedagogy, advertising & propaganda.

Creative production is nearer even to the everyday man than is conflict. Hence the creative metaphors should help make men feel ~~like~~ as if they were creating this new world themselves & so make them like it. Just as a poetic metaphor stimulates the reader's or hearer's imagination & gives him a sense of creation of himself of the object that comes to him thus.

My first book was on the negative aspect of N.V.K. The second ought to be mostly on its positive, creative aspects. Simplicity is that. Money is partly +, partly clearing away on inconsistency, a - obstacle. The training is +. This purpose will organize the entire 2d book. Perhaps it will be better to have the money a separate booklet. To enhance unity & not alienate some

people yet.

Read Wright on Creative Will &  
Sensuous Description, Clive Bell etc  
on creative aspects of art. Also  
Turing on invention

---

Improper or wrong leads us  
to make comparisons of (financial)  
value it is like a metaphor. But  
it is a false metaphor because the  
values that it makes a comparison  
often are not true. A lot of  
paper or 2# of apples do not evaluate  
one differently from Jones, & it  
is wrong to impose on us the  
same quantity of stimuli, or rather  
to assert by use of money that these  
stimuli are alike in quantity or  
quality or intensity or direction.



April 27. P.M. Gould Heard tonight  
 pointed out that courage is a by-  
 product of complete absorption in others,  
 in entire interest-affection. E.g. the  
 courage of a mother here. Wholly un-  
 conscious of her courage. It is not a  
 thing to be won by direct effort.  
 Gandhi is a example, I think. Also that  
 humility is likewise a byproduct, &  
 perhaps because of its anonations, a  
 word better to drop off using. So-Tan  
 constantly talks of it, but always  
 refers to it as fluidity & softness.  
 The proud, self-righteous, hard, "brave"  
 man is very brittle & can be punctured  
 & overthrown by laughter. Not so  
 the mobile, adaptable, sensitive man  
 who is wholly aware of his unity  
 with others & the unimportance of his

ago. Both "heroic" & "humble", hero  
& humility are largely abstract terms  
for a by-product & rather warped abstrac-  
tions. The men who are very brave  
but also inhuman to others are usually  
painfully cruel & unsocial.

Gould thinks we must work out  
a complete body-mind-soul way of  
life. He agrees with my idea from Hegel  
& adds to it, that now human con-  
sciousness itself has grown. Much  
more compassion.

The N.S. church failed to find  
the unity of conscious & subconscious  
mind. Its attempts, like sitting neat  
only on Fridays, to work out a  
whole way of life are no <sup>1/4</sup> way,  
inadequate. Romanism & Masons  
failed, because they knew no psy-

chology. The time has come for a new praxis. ~~You see~~ It will be bad for imprudent people to get hold of some of these psychic powers. Casting pearls before swine.

Gandhi's manual work is the best mode for the plain people. Then out of that the sensitive & responsible ones will draw themselves, & range on to higher steps.

Jesus did not have time to work out the praxis. Gandhi thinks he was misled also by the "suffering servant" idea & the apocalyptic idea & the idea that a dramatic death was more important than life.

If life is the more important then the es. service idea of my pamphlet is the only way, as to



avoid the madness of factions.

Under the idea of superman  
has spiritual basis of unity, 't  
you need for power & individual-  
ism, 't be Nietzsche.

opponent of Nietzsche's book J.H.  
said the Bishop of Chichester said that  
suffering seemed to be necessary for the  
flowering of genius or for reintegration  
or higher levels. J.H. says it will  
help much to be able to tell people that  
you will surely win though if  
you will only stick it.

J.H. said Hamlet & Lear were  
intended by Shakespeare as instances  
of the failure of power rulers to  
win inner unity & full control.

In Lear the prevention came from  
without; in Hamlet the failure

was inner. Hamlet was a man of action  
 & quite ruthless in killing those  
 who opposed him.

important

g.H. The <sup>important</sup> ~~past~~ year in history was not  
 the birth of X but about 700 B.C. when  
 the great dichotomy began. Relation to  
 money?

a fortnightly rhythm, a 3 months  
 rhythm in emotion & mental life.  
 Cf. H. Ellis in his book on genius. There,  
 thinks Gerald, are the cause of the  
 mystics' "dark nights of the soul", "dry  
 periods", etc. Can't force things then.  
 The fortnightly rhythm is probably  
 lunar. Probably an interference &  
 reinforcement of solar & lunar rhythms.  
 Still longer suspect ~~this~~ rhythm  
 of 11 yrs & some months.

The doctrine of rebirth is one of the things which gives India its amazing peace and stability & absence of hurry. Take things at an even pace of organic growth.

---

How can we make a v.s. appeal to the selfish advantage of the common man? If we can do that, he will freeze onto it.

---

One reason for doing the money essay is that it is a piece of intellectual clarification which, in this case, is a necessary preliminary to living it or getting others to live it. The other parts of the program can be lived, & be that better ears to hear & eyes to see, let him hear or see.



From what I share & what J.N. tells me  
I greatly doubt whether the English are  
capable of doing anything with painless  
until their Empire is reached. The one is  
completely bewildered & befuddled with the  
intoxications of power & pride as well as  
that of money that they can neither see clearly  
nor act.

From "Crisis & Criticism" by Alice  
West, Lawrence & Wishart - London, 1937.  
<sup>(in myth & poetry)</sup>  
p. 106. "The heart is the organ of courage  
and love and their opposites". [cf this  
with Herd's saying that courage is a by-  
product, & my theory that it comes from  
a sense of unity (love) etc.]

p. 97 [Re origin of language] --- "The first is  
the abandonment of the conception of language  
as being originally a means for the ex-

Q  
precision of thought, and as having devel-  
oped out of intellectual processes. Instead  
language is now realized as inseparably  
connected with ~~action~~ action, both in its  
purpose and its origin.

[Citing Ludwig Noire on origin of  
language] "Common activity directed to  
a common aim, the primal work of our  
common ancestors were the source from  
which language and rational life spring.

p 98 [Citing Sir R. Paget] "It maintains  
that such pantomimic gesture, ac-  
companying activity, when vocalized  
and recognized by the hearer through  
his unconsciously reproducing the  
gestures, is the material of language.

"This removal of language from the  
abstract sphere of thought and its  
expression to that of practical activity

is the first characteristic of recent research. The second is the stress on the importance of language, not as a means of communication in response to the individual's need to put himself in touch with the consciousness of another individual, but for the organization of society as a whole. In a book which approaches the question of language through the study of the functions of animal cries, J. A. de Saguna writes: 'It is to the great superiority of speech over animal cries as a means of social control that we must look for the chief cause of its evolutionary origin and development. The primary function of speech is the co-ordination of the behaviour of the individual members of the social

of society

Be many &  
symbols (white & blue)



group. .... Its fundamental and primary value, the value that has led to its conservation and evolution, lies in its social function of associating individuals in a new and vastly more effective type of group organization.

99. [Citing a Russian philologist, N. <sup>1920</sup> ~~Mass~~]

"But Mass does not regard this social function of language as operating only in the isolated sphere of speaking. He also links it up directly with work. For it was in the process of work that this power to express the social sentiment of the group was most valuable. The repetition of the word roused all the latent reserves of social energy and found its greater effort. In the apparently meaningless 'abstract' refrains of many primitive tribes is the real, powerful

meaning of the name unconsciously symbolizing for them their own social existence. - - -

100. "Another sign of the weakening of the intellectualist view of language is the importance now accorded in its development <sup>to</sup> ~~of~~ the hand. Marx states that human speech did not develop directly out of the technique of the production of sounds. The operation of sound production as speech required preliminary preparation, which was accomplished by the hand as the natural tool for pointing to things before they could be named. Evidence in language itself of the ~~low~~ importance of the hand is the fact that in Japhetic languages many dozens of words are formed

of learning for power & power

Q from the root of the word for 'hand'.  
Voire' also holds that the hand,  
the tool of tools by which objects of  
the natural world were made dis-  
tinct objects of human action,  
thereby made speech possible.

Page 101  
Paget also quotes medical author-  
ity for the fact that the speech  
centres of the brain develop out of  
the hand gesture centres.

101 " Beyond this concept forming work  
of the hand, as one may call it, there  
opens yet another long history of  
this practical activity by which  
man developed the use of the hand  
to point, with and to grasp.

" Moving forward also in the  
growth of language, the speciation-  
tion of sound as the vehicle of

hook up - 2002  
Smith etc.



(is the correlation any more  
simultaneous? No?)

speech is again ~~the~~ a result of work. The use of tools on the one side refined the powers of distinguishing and grasping and thus enriched the basis of speech; on the other side, the hand was now so occupied that it was no longer available for speech purposes. 'It was the continued use of man's hands,' writes Payot, 'for craftsmanship, the claw, ~~and the~~ -- [etc] that drove him to find other methods of expressing his ideas - namely by a specialized pointing - mines of the tongue and lip.

[Citation of caution on these conclusions]  
102. "We can say that it [language] is valuable as a means whereby a social group stimulates and organizes the energy of the group as a whole and the individual members of it, and

"The form has the value, through past activity, of stimulating others to action it was addressed, because it is called from a social group within which, as they know from past experience, manifested activity is possible, through its content it directs, and organizes the stimulated energy in the particular activity of the moment, and thereby stimulates it still further."

facilitates the exercise of that energy by defining the objects of the natural world in terms of the group's activities in relation to them. ---

--- "In his book, Art and Rhythm, Karl Bühler, starting from the fact that originally music and poetry always accompanied one another, finds the origin of their common characteristic of rhythm in their connection with work. Rhythm, and poetry and music together with it, developed out of the regularly repeated movements of the body in work --- Its function, according to Bühler, was twofold: to economize the energy expended by the individual body by uniting the movements and the pauses between

them regular, and by coördinating the action of one individual with others  
 .... "In addition, rhythm has the same function as that of the repetition of the name of the true functioned by them: by coördinating the movement of the individual with that of the rest of the group, by fixing a movement in which all can take part as one, rhythm not only saves energy, but also, like the word, calls up the latent reserves of social energy.

pp 105 et seq. He cites Logan Pearsall Smith's Words and Idioms, to effect that one of the greatest sources of idiom is the human body. .... "This group of idioms expresses a particular content through the bodily experience of it, or



Q in bodily terms; and that the importance of the body in these idioms is that we think and work with our bodies, we despair and are broke with them, and we are friendly with them.

"~~Something similar holds for the~~

{ The second big class of idioms are what P. Smith calls 'phrasal verbs' }

"They are formed from single verbs which express the acts, motions, and attitude of the body and its members, and these, combining with prepositions like 'up', 'down', 'over', 'off' etc. (which also express ideas of motion), have acquired in addition to their literal meanings, an enormous number of idiomatic significations, by means of which the relations of things to each other, and a great variety of

the actions, feelings, and thought involved in human intercourse, are translated, not into visual images, but into what psychologists call 'kinesthetic' images, that is, sensations of the muscular efforts which accompany the attitudes and motions of the body'. ... Thus in the group also the idiomatic quality lies in the description of a content through conveying the bodily activity and effort of performing it.

107. I May the foregoing suggest that all successful symbols, like idioms, ought to suggest kinesthetic imagery? May.

Roger Baldwin says my program does not appeal to the masses, only to

a few intellectuals. Well, neither do  
science and mathematics appeal to the  
masses, but they have changed the  
world. The things that appeal to the  
masses are not primarily intellectual,  
but more matters of will and feeling,  
economic security, political power.

A program of N.S.R. to appeal to the  
masses should emphasize first that  
it cuts down costs of living by  
reducing taxes, that it prevents  
fascism & tyranny, that it gives a  
stronger voice to power politically & econ-  
omically, enabling masses to bend  
employers to their will, that it really  
puts ultimate political power in hands  
of the people, that it can give land  
to the farmers, that by control of taxes  
and money it can take power away

But by it I think  
appeal to the masses  
matters of will & feeling  
economic security. Political power

New Book



from the big interests, Economic security, social stability, opportunity for creative expression; freedom of thought, speech, press and assembly; free and secure social life, these are the big simple desires of the masses, I believe. U.V.N. can give freedom & security better than any other mode.

Science & <sup>machine</sup> technology are admired by masses because of their <sup>econ. & social</sup> results; not because they originally appealed in & of themselves. They required about 100 years of demonstration before the masses cared much. Indeed, at first the masses were <sup>vehemently</sup> hostile. Even now it is not the real inwardness and highest controlling technical skills of math & science that attract or are understood by the masses. It's the results in terms of food, clothing comforts

and amendments that count.

The ~~man~~ I would prefer to go slowly and have an organic growth & permeation of the masses than a sudden sweep with its inevitable <sup>at least</sup> reaction. It takes <sup>at least</sup> 3 generations for a great new idea to develop.

---

It may well be that Dick Shepard's upper class instinct is making him keep this thing within limits. He recognizes it has power, but dare not admire it morally, but dare not let the working class get hold of it.

---

Things appeal to the masses only in terms of their immediate experience.

---

Many authorities say that our chief economic difficulty is our system of distribution, that the production problems have been largely solved. If so, the recap reform of money is the solution, I think.

Quotes from "Scepticism and Poetry" by D.G. James, Allen & Unwin, London, 1957  
 p. 24 Re Coleridge on imagination: "Following Kant, he believed that the imagination is creative in ordinary perception; for it is primarily due to its activity that what is given as sensation is synthesised together into wholes, so that we become aware of objects interacting and thereby themselves unified into larger wholes. And it is because the imagination in its pre-hension of the world involves the compas-



time confusion of sense impressions and effects a  
right synthesis, that it may be called, at this  
'primary' level, creative. Kant in certain  
parts of his work, and probably Coleridge too,  
believed that the imagination literally created  
nature, that is to say, that but for the  
mind there would be no ordered world in  
existence. But this doctrine is not neces-  
sary in order to see that the imagination  
as it operates in perception is creative. ---  
When it is said that the primary imagina-  
tion is creative, all that need be implied  
is that the world as we know it is  
not given to passive and merely receptive  
mind, but implies construction from, and  
interpretation of, given data. As much the  
imagination is common to everybody; it  
operates in everyone however unaware of  
it. ---

p. 29 "Mr. <sup>(B)</sup> Russell points out (Principles of Philosophy, p. 145) that all that can be learnt by observation and experiment is about 'certain patches of colour, sounds, tastes, smells, etc., with certain spatio-temporal relations.' - - Whether or not this philosophical doctrine be true, Mr. Russell insists that scientific knowledge is, in all strictness, knowledge of sense-data, and must consist in the statement of general rules relating to the succession of sense-elements. He says (Outline of Philosophy, p. 154) that 'we now realize that we know nothing of the intrinsic quality of physical phenomena except when they happen to be sensations'. And speaking of the possibility of the 'thing' being anything more than sense-data, he points out (p. 126) that 'it can be no part of legitimate science to assert or deny the present entity

if it does either, it goes beyond the warrant of experience'. ----

[Mr I. A. Richards] goes on to will be recalled [Principles of Literary Criticism] p. 207 ] to distinguish between language used 'for reference' (the scientific use of language) and language used 'emotively' (the poetic use of language). But we must realize what is implied in  
30 the notion of scientific reference, in the way, following Mr. Russell, we have indicated. And having realized this, we see that Mr. Richards' distinction between languages used for reference and language used 'emotively' is fundamentally misleading. The true distinction is between language having reference in the last resort only to sense-data, and and therefore for the

of science



purpose of barest indication, and language used imaginatively. For in poetry the poet endeavors to convey his sense of the inner unity and quality of the object as embracing and transcending what is given in sense. And we may say here, ~~and~~ that the aim of poetry is never to create emotion; its aim is to convey an imaginative idea or object.

....

39. "In his book 'Science and the Modern World' Whitehead quotes the following passage from Bacon. 'It is certain that all bodies whatsoever, though they have no sense, yet they have perception; for when one body is applied to another, there is a kind of election to embrace that which is agreeable and to repulse or repell that which is ingrate; and whether the body be alterant or altered, evermore a perception precedeth alteration operation.'

Q for else all bodies would be alike to one  
~~one~~ to another. And sometimes this  
perception, in some kind of bodies, is  
far more subtle than sense; so that  
sense is but a dull thing in comparison  
of it: we see a weatherglass will find  
the least difference of the weather in cold  
or heat, when we find it not. And  
this perception is sometimes at a dis-  
tance, as well as upon touch; as  
when the lodestone draweth iron;  
or flame Naptha of Balaizon, a great  
distance off. It is therefore a sub-  
ject of very noble enquiry, to enquire  
of the more subtle perceptions;  
for it is another key to open  
nature, as well as the sense; and  
sometimes better. '---'

"But our immediate concern is

with what Whitehead proceeds to say (p 53) after quoting Bacon: 'In this respect Bacon is outside the physical line of thought which finally dominated the century. Later on people thought of passive matter, which was operated on externally by forces. I believe Bacon's thought to have expressed a more fundamental truth than do the materialistic concepts which were then being shaped as adequate for physics'. But whatever the 'fundamental truth' may be, no one doubts the enormous success of the 'mechanistic' representation of the world, nor can we conceive that the line advocated by Bacon, and pursued possibly by Vaughan, could offer a foundation for the purposes of science. 'For else', says Bacon, 'all



bodies would be alike to one another'.  
But to represent ~~bodies~~ objects is not  
undesirable when one's end is the dis-  
covery of general, inclusive formula-  
tions. And science therefore laboured  
to empty its imagination of such  
a view of nature as Bacon propounded.  
Actually, as we have noticed, it  
could not and cannot do so with  
complete success; the 'essential intelli-  
gency' of the imagination cannot be  
destroyed, and the materialistic and  
mechanical view of nature is in reality  
never wholly free of the view Bacon  
is urging. It does not view matter  
as active, as Bacon wishes it to do;  
it views it as completely passive.  
But this complete passivity cannot  
be imagined other than as the

complete passivity of what is essentially  
 active and sensitive. In poetry in-  
 deed we may expect to find such a  
 view of nature as Bacon expresses;  
 nevertheless such a view would be a  
 fatal hindrance to the abstract  
 investigations of science. In science  
 the imagination is a servant, and  
 must be kept in the strict subor-  
 dination to the purposes of science;  
 if it got out of hand it might  
 turn the scientist into a poet, a  
 very undesirable metamorphosis surely.  
 And the success of science has depended  
 on the activity of the imagination  
 trained to the greatest possible ~~degree~~  
 degree to represent nature as 'passive'  
 and 'blind'; and its success must  
 continue to depend upon such a dis-

2  
cylind imagination.

"It is foolish therefore to complain that when science approaches the study of the behaviour of what are called organisms, it should refuse to yield up its imaginative scheme.

41

For it is as necessary in biology and psychology as in what are called the physical sciences; and the only hope of a scientific biology and psychology lies in its retention in these spheres. Just so far as human beings and the lower organisms are in any degree a part of the physical world, they must be incorporated into the inclusive scheme which science has developed in its inquiries into the physical world. The reasons which make a material-



Q. The and mechanistic scheme necessary for the investigations of the physical world make it equally necessary, in investigating the behaviour of organisms; and organisms must come therefore to be regarded, as far as is possible, as only differentiations in the uniform self-identical matter of the world; if biology and psychology are to consist in anything but comparatively vague observations, it cannot be otherwise. --- The scientific study of human behaviour is necessarily the study of the nervous system, imagined as a mechanism. --- Evolution.

42.

"At the same time we must remember that we are speaking of the scientific imagination. And the imagination, as we have already said, is that which goes beyond the order of fact. Hence, though

in science the imagination is disciplined, for scientific purposes, to contemplate a world as nearly mechanical as possible, it would be a great error to think that science is able to say that such is indeed 'the intrinsic quality of physical phenomena'. It is convenient for science so to imagine the world. But that is all that can be said. To think that mechanism can be asserted as a metaphysical theory of reality, the validity of which is shown by science, would be to fail to distinguish fact from imagination. Science, in all strictness, can give us, as knowledge, only verifiable fact; that it should find certain imaginative schemes useful in its work is a matter of interest but no

foundation for metaphysical doctrine."

47. "However much we may stress the disinterestedness and contemplative power of poetry, poetry arises nevertheless from the felt need for an augmentation of life which carries it far beyond common sense and sense alike. Detachment and release may be among the marks of poetic experience; but such detachment and release occurs as instrumental to vital need; they arise within an experience which issues from a desire to encompass life, and, by encompassing it, to master it. To recreate the world in a perfect unity of imaginative pattern is its end - a labour which springs from the feeling of helplessness and ingratiation in the face of an initially disordered



and confused mass of experience  
provided by the primary imagination. . . .

48. "The imagination is always a  
process of organizing and synthesizing  
experience, whether at the lower  
and rudimentary level of the primary  
imagination, or at the higher  
level of the secondary. . . .

49. "What the imagination makes is the  
world to which the deepest and  
most strenuous life of personality  
responds, and to which it adapts  
itself in all its activities. . . .

90. "The importance and effects of rhythm  
and rhyme have been described by  
Coleridge, and need not be repeated  
here at any length. Briefly, it is  
that rhythm and rhyme together

create a pattern into which our mental activities fall; there is thus created a cycle of expectancy which naturally creates opportunity for surprise. The effect of such expectancy occurring with a repeated rhythmic cycle, is to capture interest and attention to such a degree that Coleridge called it a kind of hypnosis. Rhythm should thus be regarded as integral to the rhythm; it takes its place as part of the pattern and contributes therefore to the general effect of the rhythm.

110-111. "The growth of self-consciousness is a constant reacting and reconstruction of our mental life. Self-consciousness is not a coming to be aware of what was already there. Paradoxical as it may seem, the way in which we

of Swinburne  
a substitution

Q represent ourselves to ourselves determine what we are. When the little girl plays with her dolls, adopting toward them a maternal and authoritative attitude, she is reconstructing and expanding her mental life; similarly in adult life, my representations of myself as a person of a certain kind determine my action and my relationships to others, and thereby changes me. In this sense self-consciousness is creative of the self.

[See also his pp 75, 114, 115, 116, 118, 123, 124, 166, 168. also re Shakespeare]

118. "There is an impersonality which the lyrical poet must achieve in the singing of his joys and sorrows, a detachment from himself similar to that which the dramatist has

re  
suffering



from his characters; we may also view the  
 tragic heroes of Shakespeare as lyrical  
 poets who achieve the lyrical act of  
 catharsis, which in M. Brémond ob-  
 served, is the liberation from his emo-  
 tion which the poet must achieve  
 and which makes his poetry. It is  
 the depersonalization which the imag-  
 inative act accomplishes. And in  
 the development of the doctrine of  
 catharsis and its application to  
 tragedy, it has been overlooked to  
 what extent catharsis acts within  
 the play and within the character  
 of the hero. In each of the great  
 tragedies of Shakespeare it is possible  
 to point to a speech in which the  
 catharsis, the release from immersion  
 in the materiality of emotion, is

affected. It is towards the process of  
deliverance that the tragedies move,  
and in it they find their consum-  
mation. And in this process, the  
achievement of the condition through  
suffering, the inner significance of the  
tragedies shows itself. In  
their final achievement is a lyricism,  
a submission to catharsis, the stilling  
of passion through imaginative  
awareness. And we might add  
that unless the catharsis is  
accomplished in the play, it  
cannot be accomplished by the  
play (e.g. Troilus & Cressida.)

Since the present economic break-  
down is due to faulty distribution, my  
money reform would cure that and

thus avert Fascism (which in turn is due to ec. pressure). Getting rid of Fascism would be a big step toward ending international war; and good distribution would aid greatly to ease the class <sup>war</sup> struggle.

---

In money reform part of the trust (credit) is from individual character, part from the good qualities of group life. A la H. George's ideas re land values. Don't let the bankers get hold of community-based trust.

Is a strong will the result of a clearly imagined picture of the self and its relationships - i.e. of Self Realization?

---

If I do not provide a fairly clear &



long term economic & social program  
for n.v. states to work, there is the  
danger of sweeping the room clean &  
then nothing to do, and a further  
reaction. Unless they see a new  
order they won't get enthusiastic.  
People are not imaginative.

For the big economic reforms I  
favor money change, single tax, &  
cooperation, <sup>decentralization</sup> By taxation govern-  
ments compel the use of money.  
By ring reform a partial escape  
from that hardship is possible.

Q From Philip Mumford's "An  
Introduction to Pacifism" - Cassell,  
London, 1937.

p. 121 of ms. "To desire peace is not pac-  
ifism - the majority of people do

that; to be ready to sacrifice oneself for peace is not pacifism - soldiers have done that in their thousands; to try to get peace is not pacifism - politicians in hundreds have made that attempt. Pacifism is neither a creed nor a political campaign; it is a way of life, and, to be effective, no easy one at that. We need to make peace, to create it - and creation entails knowledge of truth and acknowledgement of truth. Therefore pacifists must understand their own motives and so build upon firm foundations. " - - -

ms. p 111. " Warfare is the generally accepted method of obtaining security for homes, country or political ideals, but it should

not be forgotten that no nation in the world admits that it would use this method except for the defence of its honour and legitimate interests. The significance of this should be stressed, notwithstanding that the motives of certain countries (or their rulers), may be open to the gravest suspicion. The fact remains that the conscience of the masses is such that no leader could declare war without persuading his followers of the defensive necessity of such action. By disarmament we should deprive our potential enemies of this excuse - deprive them, that is, of their power to attack us.



Baldwin saying in Parl. re bombing  
more babies & women of the enemy &  
doing it quicker is the only modern  
defense, also applies to class war.  
Add to that the indiscriminateness  
of it. "The first casualty in every  
war is truth."

Some of my notes on Surin's "Nature of  
Human Conflicts"

My chapter on n.v. programs should  
make clear the reasons for the proposed  
actions and why they do what is  
needed. Thus make clear the organ-  
izing and preparation for action. p 410.

In addition to NVR being a stim-  
ulus to the potential goodness of the  
opponent, and causing growth by  
prolonged repetition, it helps the

opponent to change his actions by re-  
organizing his ideas and values, changing  
the sentiments which control his actions.

p. 420.

Our best preparation is via indirect process p 422

Money is one form of external stimulus  
with a pattern of its own.

Not only are nervous systems of man-  
kind unchanged for the past 50,000 years,  
but also he has been using symbols &  
language also for a very long time.  
Certainly all extant savage cultures have  
these.

p. 356. There is physical birth, then  
mental birth with language & symbol  
(about age of 7 or 8). New integrations at  
puberty. May H.V.R. be a still further  
variety of birth?

Although the child learns to use

language and symbol about the age of 2 to 2½, not till about 7 to 9 does the functional barrier develop strongly. Why this time lag?

The conversion of capitalists or violent opponents requires an alteration of their functional barrier or its concomitant elements. cf. p. 375.

A pamphlet on money may help to alter capitalist sentiments and appositions and values, as well as helping us to understand the capitalists and their own weakness. Perhaps it might free the Drahers. p. 391. Since inner conflicts (and anger + fear) destroy the functional barrier, it is exceedingly important to have a fully consistent philosophy of life and to do away with anger and fear at



the start.

The conclusions of this book explain the need for giving prisoners a (higher) philosophy & also why music is so helpful to them. Shows the soundness of Gurdjieff. Put my book in prison libraries.

This book, based on rigid psychological experiments, tallies very closely with the anatomy and evolutionary studies of Elliot Smith & of "The Antiquity of the Mind". Function corresponds with structure.

If (p 13) emotion is caused by the blocking of activity, and if we generally (but mistakenly) think of will as the decision to act, we get angry when our "will" is thwarted. There usually follows violence. If we

relate this to James Field's  
concept of will.

127

learn and come to believe in a different concept of will (such as in this book) we can perhaps eliminate anger when our action is thwarted. Then we can be n.v. without self-repression.

Connect Dime's concept of will with the concept of training for n.v., both individual and group training.

The affects used in experiments of Part I are fear and anxieties. Therefore there is a strong motor tendency toward fight or flight. No wonder the functional barrier breaks down.

Forgiveness is necessary to recreate a healthy unity after the injury, — to restore a feeling of psychological security in the wrong doer and bring him back into unity. He must not be allowed to wander outside of the unity for he will be a

constant danger to himself and to society  
and to me, if the unity is not restored.  
cf. p. 115.

The data in pp 150-169 suggest that  
possibly if the u.v.s. can prevent an  
injury to himself from getting under his  
skin, from entering his personality, from  
being accepted by himself, and instead  
treat it as an external trauma, then  
the emotion of it will not enter into  
his motor system and hence he will not  
strike back. I.E. Buddha's idea about  
the angry person's wound preparation or  
armor. A correct concept of the true  
self, - its intouchability, its eternity,  
its omnipresence, its interpenetration  
into all (gita) will do much for this.  
That such traumas affect the  
vegetative system indicates need for



thyroid control and a chance of control by suggestion or prayer or thoughts. By doing something equivalent to confession the sinner can get control of himself.

1.8. bring the whole thing to consciousness and place it in relation to the great guiding sentiments. Connection with the higher functions of personality (sentiments) ~~is~~ is very important for all such controls.

If suffering creates sensitiveness & liability to new and deeper understandings, the sight of voluntary suffering (by sympathy or empathy) would have the same result & thereby make possible the conversion and persuasion of the violent opponent.

In working out discipline we may need one kind for stable people,

another for Calhoun over. p 323.

To build up self control means to strengthen the functional barrier and strengthen the elaborating mechanisms during the latent periods p 323.

Prevention of inner conflict strengthens the functional barrier. So also does prevention of fear & anger.

Plan out what to do in case of violent attack, and write it aloud, individually or together, or write it out.

Complete this book with "The Ethics of the Transcendentalist" by Edgar B. Holt.

Do not speech and symbols help create & maintain the functional barrier?

Are the brain areas controlling

the hand (word & gesture) near and connected with the brain area controlling speech? What <sup>various</sup> connection is there between the area of hearing and that of speech?

If there is a new connection between the areas controlling hand and speech, that would add validity to the desirability of manual work as a means of training, because of the part that speech plays in organizing social life.

The conclusions of this book interestingly tie up with Boisron's book "Exploration of Inner World"

p. 115. <sup>Quoting</sup> "Confession is a path to the relief of affect and to the reestablishment of a more normal functional life." <sup>Now</sup> After confession carry out some action of doing good to those who have been wronged and to society. This would help



toward the establishment of true, normal relationships, and hence psychological safety. This corresponds in the psychic value to physical flight to a place of safety. <sup>Also accomplished control over the separation (hostile force) which would harm me physically.</sup> <sup>On physical plane anger seems to create activity, i.e. separating itself from the hostile force; On psychic plane safety is obtained by unity & harmonious.</sup>

cf p. 136.

for control  
wonder in  
v.

This suggests finding psychic equivalents to flight and fight in order to provide psychic ~~equivalents~~ satisfaction for the emotions of anger and fear. Psychic safety lies in <sup>harmony</sup> unity. ~~When~~ If that safety is threatened and I feel that I am stronger than the threatening force, then the equivalent of fighting (to satisfy and carry out the emotion-impulse of anger) is to do some-<sup>or someone will think good & the end of anger as well as the</sup> thing to assert the unity. <sup>Some for</sup> Same for <sup>exterior</sup> equivalent of flight, because in this psychic field the safety is unity and is in itself power, a condition.

In physical realm the place of safety to which we flee gets its power from its location, its physical remoteness from the ~~the~~ hostile force. In flight you act on <sup>primarily</sup> yourself; in flight you act on the enemy. ~~both of these make fact.~~  
 In seeking psychic, spiritual & moral unity, since ~~unity~~ attainment of unity is a mutual affair, the action is both on oneself & on the opponent simultaneously to a far closer degree. even in physical realm, in long run safety does not come from remoteness as between people may know,

p. 344. Important bearing on N.V.R. in relation to young children (i.e. before age of 8)

p. 461. "The human is able to control not only the external world but his own behaviour indirectly by the creation of artificial necessities and stimuli produced artificially especially for the purpose is a cardinal factor in the development of

unity lies not in myself but between you & me, in our relationship.

pe.  
training

behaviour. " { This is what military discipline consists of, - a pattern of external & internal stimuli (etc) }

"Voluntary behaviour is the ability to create stimuli and to subordinate them; or in other words, to bring into being stimuli of a special order, directed to the organisation of behaviour. [Some outer & some inner. of Indian modes of discipline, - simple surroundings, certain postures, then inner attitudes.]

402. "Although the human cannot make a path by virtue of his will power, he is able to follow a circuitous route by acting upon himself just as he formerly acted upon nature, making use of the laws of nature and consciously subordinating them. ---

403. "Direct attempts to control his be-



behaviors always lead to negative results; its mastery is achieved only by indirect means. The mechanism of the will is the least of all included in the direct will power, and it always consists in the use of certain external or internal means, in the reconstruction of the psychological process." ---

412 "Speech is the means of organizing and regulating the external world, including the separate elements and stabilizing the picture, and on the other hand, it is the agent of organizing the behaviors, of planning further actions, saving the human from subordination by direct optical situations and activating his behaviors.

423 "Conditioned optical symbols should play the same organizing rôle as the

activity of speech does

---

Referring back to, pp 131-133, when  
opponent is <sup>morally & politically</sup> stranger, & unity (safety)  
must be sought with other people  
(work for unemployed); when the nva  
is stranger, then he may engage in  
immediate n.v. resistance to operate  
immediately on the mind & heart of  
the opponent. These two correspond  
to flight & fight in the physical  
In the n.v. the <sup>mind & spirit</sup> unity of both opponent  
values. & nva must be obtained.

---

One of the difficulties with  
most people is their unwillingness  
to accept responsibility. Perhaps  
one remedy for this is to build up  
self-reliance via K.

Bygonnave, a study of a distressed one  
 by Hilda Jennings 256 pp. 10/6 net  
 Allen & Co. Ltd., 5 Wardrobe Place,  
 Carter Lane, London, E.C.4.

---

Another reason for KK is that eventually in the n.v. struggle in the State  
 there <sup>may</sup> well have to be refusal to pay taxes  
 & consequent need for almost self reliance  
 economically as well as politically. KK  
 prepare for & permit this step.

---

Because n.v. centers will be harassed &  
 oppressed, they should learn the Greek  
 methods of producing food, so that on very  
 small areas of land they can raise much  
 food. Can heat water in coils in the sun  
 & store it in insulated tanks.



The explanation of the paradox that  
he that loathes his life shall find it  
is that the principle of evolution is  
that of continuously higher <sup>subtler</sup> & more complex  
forms of integration. To take a risk, to  
undergo danger is the ~~reverse~~ <sup>a</sup> way of  
saying that you deny fear, which is a  
reverse way of affirming a unity,  
& thus making a closer integration.  
All life depends to that principle &  
relies to its support. Hence the  
risk is not so great as it seems. It  
is a great <sup>risk</sup> only in one aspect, only when  
we forget the imponderables which  
are steadily pressing toward a higher <sup>subtler</sup>  
organization. Of the risks which  
life took in creating soft & defenceless  
man. The denial of self is the  
affirmation of the greater unity, & ∴

attracts to itself the ~~for~~ support of many  
forces, by themselves weak but <sup>together</sup> in  
unity strong.

Not all taking of risks are affirmations  
of unity. E.g. standing in front of an  
oncoming train is folly, not bravery.  
But taking risks ~~of~~ by a n.v.s. or of econ-  
omic risks involved in cooperation or  
in ~~self~~ use of money scrip are affirma-  
tions of unity.

---

Fall of population (about 1945)  
will call for use of K by individuals.  
What types of investment best?

Use Gericks methods for this.

The fall of population will compel  
attention in the money system. My  
proposal ~~accepted~~  $\therefore$  have fair chance  
of adoption. Say so in the article.

The policy of the Am. F. S. C. and of  
Inalienism generally toward the whole  
social problem is one of comfortable  
middle class charity, not one which  
working people can well use.

---

Proportion: The <sup>ratio of</sup> height of the  
Parthenon to its width is 4:9. 5:8 is  
a pleasing proportion often found in Nature  
and in Art. 8" is 1.600 times 5" or  
very nearly so. If you multiply  
any number by 1.61803398875  
you will get a larger number which  
is in pleasing ratio to the first  
Speed "Practice & Science of Drawing".  
This number is "the exact proportion  
(ratio) which should exist between  
a series of quantities for them to  
be in the same proportion to their



neighbors, and in which any two added together would produce the next." It is actually  $(1 + \sqrt{5}) \div 2 = 1.6180339888 +$  called the 'Phi proportion'.

---

The coming decrease in population all over Western Europe will have some ~~of the~~ effects like the Black Death, I think. I.E. It will give <sup>skilled</sup> labor a strong bargaining power. That may make Fascism impossible.

---

② "On Growth and Form" by D'Arcy Wentworth Thompson - Cambridge Univ Press. 1917. (S. 1) Chap XVI on Form and Mechanical Efficiency. In his Epilogue he writes, "I know that in the study of material things, number, order and position are the threefold clue to exact

knowledge; that these three, in the mathematician's hands, furnish the 'first outlines for a sketch of the Universe'.  
--- "The living and the dead, things animate and inanimate, we dwellers in the world and this world in which we dwell -- are bound alike by physical and mathematical law." p. 50 "What we call Form is a ratio of magnitudes, referred to direction in space".

↓  
The optimum <sup>soil</sup> temperature for growth varies from plant to plant. For many it is around  $26^{\circ}\text{C}$  or  $77^{\circ}\text{F}$ . The optimum for maize is  $33.5^{\circ}\text{C}$ . Pea  $28.5^{\circ}\text{C}$ .  
Partly chemical, partly physical forces (e.g. molecular combination & various <sup>catalytic action</sup> etc.  
Relate this to medicine.

p. 153

"Electrical stimulation of tadpoles with small current density and low voltage

increase the rate of regenerative growth. As just such electrification would tend to lower the surface-tension, and accordingly decrease the external resistance, the experiment would seem to support, in some slight degree the suggestion which I have made, i.e. that the slowing of growth as age increases is due to a change in the resistance against which the forces of growth act, i.e. the tension of the surface, the development of resistant membranes or skin, both in the joints & the whole body & fibres.

p. 136 "The great function of natural selection is not to originate but to remove."

---

I have as much right to analyze & invent a new idea as money as Pasteur did as medicine, as the barber did to invent the spinning jenny, as the priest did to



work out the law of heredity.

---

If we are going to have <sup>inflation or</sup> another and a prolonged depression, then instead of earning money I ought to be busy earning human trust, especially the trust of my neighbors & fellow townsmen. My writing is earning me trust, but it is very widely spread & not monopolizable. By extending my personal life not via ornaments & money valued things but via imponderables, I am approaching the spiritual & ∴ the eternal. Quality of service counts more than quantity of years.

---

Not only should we forgive and settle our quarrels before we pray; we should also positively make more human unity by deeds of kindness before we

pray... Thus we unite ourselves with God  
in man as a prerequisite to uniting  
directly with God.

One function of n.v. training is to  
aid in establishing new habits of thought,  
feeling + sentiment, economic political &  
social action & community relations. Also  
to strengthen motives

Since there is no unity to the <sup>personal</sup> ego,  
what is the philosophical meaning in  
K's advice as to prayer, of "I think  
That that" etc "has happened."

Try seeing black as an aid to  
relaxation before meditation.

Could Ingham develop a test for

the individual to know whether his  
urge to speak is spiritual? All  
business ought to prepare for meeting  
by individual meditation. Also we  
breathe. That by "The fruits of  
the spirit are love, joy, peace, etc.  
kindness, goodness, meekness," etc. (not self-assertion  
of charity chapter)

Money snip would make managed  
currency of price index perhaps  
easier.

---

Since the world is continually, under  
capitalism, in economic war, each  
nation with all the others, & this  
war occasionally breaks out into  
military form, we must work  
out an economic system to end  
this. I'm doubtful that  
socialism would do this. Reform



of money would help this. So  
would K.

What will be the effects of the fall in  
population on war, on Henry George's  
theory, on socialism, on balance between  
Asia & Europe?

Is my money theory only a rationaliza-  
tion of a desire to have a better world  
at out of little effort to myself? Is  
it just another devil theory, a projection  
outward of something that is really inner?  
Or a rationalization of my resentment because I am not good  
at making money. — A.F.B. said I could have been rich if  
I had wanted to.

The ultimate & chief insecurity is  
diminution, separation from man & from God.  
Therefore the chief security is in unity  
with man & God. That is something to live  
for & to die for. Cultivation of the things

that bring it gives significance to  
life & to dying in its behalf. That is why  
dying or being tortured as a C.O., provided  
<sup>ed</sup> you have given your life previously to  
promoting such unity, is more valuable  
than fighting as a soldier.

Hence the value of  
meditation.

To build up a sound community &  
nation there should be certain elements.

For the body: A wide understanding and  
practice of sound diet, including  
methods of cooking and of food  
preparation and preservation.  
<sup>Caution sex education. Economic interest.</sup>  
Economics: A sound system of land tenure  
and taxation; a better money  
system; a thorough system of  
social security (!!!); an adequate  
program & practice of conservation &  
utilization of natural resources, -

land for agriculture, forests, water power, coal & oil, other minerals; a sound system of agriculture based on ecology; K; Housing <sup>made</sup> a public utility

Social matters: A wide understanding <sup>& practice</sup> of non-violent persuasion in all its implications & training; the family; education; religion; cleanliness & neatness. <sup>Culture of love</sup> and truth and beauty

Hence all these things are within the purview of n.v.

The labor movement has had much n.v. in it all through history. But it has been ineffective because it has been



undisciplined, limited and momentary.  
Organized labor, for example, has usually  
supported war. Individually many  
workers go in for violence in personal  
relations. They use violent language.  
N.V. implies respect for personality, but  
organized labor has not shown  
enough of that. It has only recently  
supported much educational program,  
not helped its family & women's affairs  
enough. The tendency & preference of  
labor to be N.V. in strikes is not  
enough, any more than the personal  
courage of most men is enough to  
make them good soldiers.

If it be true that all nations are  
in economic war with each other, then  
all people engaged in manufacture,

trade, banking, finance are the soldiers,  
 - mostly conscripts because of the power of  
 money. All the unemployed are  
 clearly economic conscripts, but they  
 are also economically wounded and  
 put out of action. This being so we  
 should show n.v.r. to modern industry,  
 commerce & finance. Cannot readily  
 separate domestic from international  
 trade for this purpose. Each needs the  
 other. **E** Economic n.v.r. must include  
 the building of a better ec. order.  
 K is a part of this, because it will  
 end economic competition. Cooperation,  
 single tax and money reform will all  
 help. Work this out further.

Gerald Heard sent me last autumn  
 the following list of books as <sup>showing</sup> bearing on

the evolution of mind and the errors of  
Marxian philosophy:-

The Mental Basis of Thought - J. Campbell  
Elliot Smith - Harvart Press

Evolution of the Mind - Elliot Smith, Supple-  
ment to "Nature" Feb 17, '34.

also "Nature" Vol 125 p. 220, <sup>MSO</sup>

"Human History" - Elliot <sup>Smith</sup> ~~Stokes~~ (1930)

The Diffusion of Culture - Elliot Smith  
(Watts London)

The Zoological Position & Affinities of the  
Tarsus - Proceedings of Zoological Soc.  
1920 or 1930

Essays on the Evolution of Man - London 1927

Morphology of the Brain of the Mammalia -  
Linnean Society Vol III 1903

Full of population in West may  
make room for Eastern market changes



& i. put Indians in stronger position to bargain.

Look up books on anatomy of nerves to show connections, if any, of breathing & thyroid gland.

---

Since I believe that out of India will come the next great step in civilization, would it not be wise for me to prepare another edition of Ec of IS?

---

My life gets its significance from the quality (not quantity) of <sup>my</sup> ~~the~~ relationships with ~~the~~ other people & with god (i.e. with god outside & god inside). If I always do my utmost to keep these right, no person & no kind of treatment can depress me or cast down my spirits or give me an inferiority sense.

the new barbarian: one requires self a vigorous crowd action  
caused by money, failure of virgin, etc. maybe unemployed will be the  
entireness.

Even in prison, in torture or in ostracism I can  
steadily & patiently  
try to keep my side right, and if need be put  
more emphasis & time on my relation to  
God.

Just as my thoughts and desires deter-  
mine my actions, so my relation to God  
(within me) determines the quality of  
my relations with people, provided I strongly  
believe that God is in all people. Also my  
relations to people colors my relations to  
God because God is both within me & within  
others as well as being transcendent.

---

If our civilization is collapsing & the  
new barbarian is within us, what shall  
we do to cope him? Just as in Roman  
times, self-purification & building community

---

Make a study of the way in

which Gandhi has in advance publicized and dramatized the meaning of his campaigns, so that they could not be nullified by mere imprisements & isolation of the senters. This is needed in order to make public opinion count as heavily as possible. That not only helps the struggle at the time, it educates millions of people all over the world to the nature of the struggle, persuades many, & lays the ground for a subsequent campaign and opinion of the method. Here is where purification counts heavily.

To have <sup>a great</sup> ~~too~~ many beautiful things is like overeating good food.

If the authentic industry because of



the falling off of demand, can no longer enforce former property rights in its coal lands & the ~~last~~ mining has gone back to hand methods by the bootleg miners, the same thing will happen in other kinds of industry when the population begins to fall. The existing population will have to supply its needs by hand, and by the time the population gets stabilized again much of the technical machine skills will have been lost.

---

There is little use in trying to build up community & so on by certain stimuli, if we permit contrary stimuli to go on acting more constantly than ours. E.g. that of money.

We respond only to those stimuli

which have significance for our life.  
 2. of the blind woman and certain sounds  
 as of rain. By coming to understand  
 money we can decondition ourselves  
 from its former influence on us &  
 thus increase our freedom & be able  
 to build up our community more  
 carefully.

Arthur Morgan told Don Stephens  
 that he first limited education & worked  
 at that. Then he saw how educated  
 people are frustrated & do not carry  
 out their ideals. He now believes  
 that community conditions thwart  
 education & so he wants to rebuild  
 community. Sounds like Marxist  
 idea. I think it is not primarily the  
 outer environment that does it but

the inner values which control both  
the individual & the community.  
One of those is money. If I can  
dispute both the money & violence  
matters, it should help much toward  
freedom.

---

Don't put too much about short-  
ness of time. We have eternity  
in which to work. Get the right  
attitude first; then work steadily  
toward expression of it in action.  
But always use the right means &  
manner, even tho' that seems too  
slow & to result in not putting the  
ideal into effect. My job is to use  
the right means all my life, &  
let God take care of the final  
realization of the ideal in action.



The Scrip money would make it much easier to control the quantity of currency by separating that function from the others. This would in turn make possible control of fluctuations in the ~~price of money itself~~ & yardsticks and hence stabilize prices of all commodities.

---

Re "Mass Observation" questionnaire  
 "What is your greatest ambition? What are your superstitions, in order of importance? Do you approve of the institution of marriage as it exists in this country at present? If not, how would you wish it changed? Can you believe you are going to die? How do you want to die? What are you most frightened of? What do you mean by 'freedom'? Do you

welcome or shrink from the contact  
by touch or smell of your fellow men?  
Do you avoid looking at street accidents?  
What is the ugliest thing you can  
think of?

"I Knew them in Prison" by Mary B.  
Harris - Viking Press, 1936.

Quotations from "Europe in Arms"  
- B. W. Siddell Hart - <sup>W.C.I.</sup> Faber & Faber,  
London (24 Russell Sq.), 1937  
(Military Correspondent & advisor on  
Defense to the London Times)  
Chap I. on "The Defense of Freedom":  
p. 3. ... "War is a compound menace. It  
threatens not only our national exist-  
ence but all that makes existence  
worthwhile."

"Events have brought this menace to the  
 fore, and its implications must be faced.  
 At present we are not facing them  
 squarely. One section looks to the  
 repair of our own arms - and looks  
 no further: the need of arms is asserted  
 with little regard to whether they will  
 be effective, and still less to where they  
 may lead. Another section, for-  
 swearing arms, looks so far ahead  
 that it overlooks the reality of  
 immediate risks: contemplating a  
 world of common ideals it ignores the  
 destructive ~~force~~ power of force exercised  
 by neighbors who have different ideals.  
 'Pacifism' and 'nationalism' are hurled  
 from side to side as opposed terms of  
 reproach. Meantime a large ~~body~~  
 part of the public, confused by the



counter-cres, tends to take the line of least resistance to the danger.

p4  
Such passive acceptance of fate does not even promise the fragile hope that a policy of passive resistance holds out, while it jeopardizes the building of actual defenses. The dangers of this national division, and confusion, in the present critical situation ought to be realized.

Without sacrificing the national diversity which is the source of vitality it should be possible to reach some common basis of cooperation among men of good-will. They must continue in building a bridge, unless what each holds dear is to slip into the chasm.

"The first need is to achieve a

clearer idea of differing points of view. The ardent believer in defense by arms must try to understand the intellectual position of the pacifist, instead of hurling denunciations which miss the mark while marring the atmosphere. The ardent lover of peace must respond, by giving due weight to the practical case for armed defense. Perhaps the difficulty is greater for the former, the 'instinctive patriots' who are accustomed to accept unquestioningly so much that thought free men are bound to submit to the test of reason. They are apt to regard as blasphemous, against the tribal gods, an attitude that is essentially a searching for truth and a fervent desire for a true basis ~~for~~ of national faith. But they should be able to

see the danger of splitting the nation,  
and should realize that any per-  
suation of pacifism is the surest way  
to strengthen it. The problem of  
reconciling pacifists to the necessity of  
defense is more complex. The  
arguments for aligning force have  
so clear a moral basis that, in a  
Christian country, they start with a  
moral advantage ~~that~~ over the  
arguments for armament. In  
theory, they must command the  
assent of all decent men, while  
their simplicity strengthens their  
appeal. And even on practical  
grounds there is a stronger case  
for pure pacifism than is generally  
realized. The power of non-  
violent resistance has been demon-



p. 5  
strated on occasions, and in spite of its experimental nature it has achieved some notable successes. Its advocates, however, are inclined to overlook the fact that there have been obtained against opponents whose code of morality was fundamentally similar, and whose ruthlessness was thereby restrained. Moreover, its employment against a government, by the spiritually minded members of a religious or political movement, is quite a different matter to its employment in the conflict of nations.

To offer any chance of success here, it not only demands a higher collective morale than any army has attained, but requires this fortitude to be shown by a whole people. The

effectiveness of an army can be maintained by strong leaders supported by an adequate nucleus of standards and highly trained troops, since it is the well-aimed shot which mainly counts, whereas the effectiveness of non-violent resistance is undermined if a fair proportion of members can be induced, by weakness or self interest, to serve the opponent's purpose. Comparatively, an army is more dependent on its strongest elements, an unarmed force more dependent on its weakest. *Qualitative difference.*

"Facing these difficulties honestly, and taking account of prevailing conditions, can any reasonable man hold out the ex-

justification that the nation as a whole  
could be persuaded to try the tre-  
mendous experiment of pure pacifism?

If not, its advocacy can only weaken  
the power of this nation to resist the  
forces of hostile nations, where  
pacifism is suppressed. The break-  
down of our defenses might spell  
the end of our tradition of freedom  
as well as of the pacifist aim.

The issue cannot be shirked. Those  
who give peace for the sake of  
ideals, not merely peace at any  
price, have a grave responsibility.

If the need of defense be admitted  
as a practical necessity, it largely  
lies with them whether the defense  
is adequate. Their support is essential.  
By withholding it, they invite the

But does not  
weaken the power  
to resist after  
war  
your  
and the building up of the  
defenses, the war will  
inevitably break down freedom,  
Germany will have become  
the victor of the war.  
of Denmark after the defeat  
p. 6. 6. 6.



(?)  
much  
1/1

downfall of the home of their ideal. In return for their support, however, they may justly expect guarantees that it shall not be abused; that measures of defense shall not lead to militarization or the curtailment of freedom. Here the government, the services, and the vocally patriotic have a duty: to avoid offense. Denunciations of pacifism inevitably excite suspicion of the speaker's ultimate aims, and thus stiffen opposition. Propaganda for defense too often fails to convey any idea beyond arming because others are doing it. None but the unthinking and those whose patriotism is self-interest would

regard defence as worth while if, in the process of defence, the spirit of this country were to be extinguished and only the <sup>husk</sup> remain.

"But something more than a working agreement on actual measures is needed. This is too passive - and passive defence will not suffice against a vigorous challenge. There is overflowing vigour in the foreign nationalisms, even though it be obtained by a contraction of spirit which tends to ultimate exhaustion. Men who are infused with a faith, even a false one, will beat men who have no faith; only a good one can withstand the impact. Those who complain of the younger generation's lack of patriotism

Pacifists,  
too, are such

should, rather, reproach themselves  
for their failure to define and  
teach patriotism in higher terms  
than the mere preservation of a  
geographical area, its inhabitants  
and their material interests. Such  
a material appeal offers no  
adequate inspiration, nor cause  
for sacrifice, to the young.  
Those who are concerned with  
practical questions of defence  
ought to realize the practical  
importance of ideals, especially  
in arousing the British people.  
Again and again it has been  
found that the economic  
appeal had little power to  
overcome their characteristic  
inertia until something stirred



their latent idealism. The man  
 who does not take due account of  
 this element is a fool. Its  
 prevalence, as well as its purity,  
 would seem to have increased in  
 recent times. The significance of  
 repeated demonstrations of its  
 power is the greater because it had  
 no prophet to express it adequately.  
 The professed patriots have con-  
 centrated on a doctrine of national  
 self-preservation, and their appeals  
 have had a metallic ring. This  
 marks a relapse. Two generations  
 back, Kipling provided the British  
 people with a gospel of Empire  
 which raised Imperialism above  
 mere patriotism: today its credulity  
 goes, but it has found no replace-

ment. There is need for a new  
vision - one bigger than Kipling's  
and better. Need, also, for the  
sense of a mission - not so much  
to rule as to influence by example.  
To gain this we must grasp  
the elements that matter in our  
tradition - above all, the spirit  
of freedom. In freedom, truth is  
perceived and justice promised.  
From the liberty, vitality springs.  
If Fascism and Communism can  
raise enthusiasm among the  
young, how much better  
sources have we from which to  
generate it. At the same time  
it requires, not a diminished  
but an intensified self-criticism.  
For in such self-criticism is the

Money prevents all this.

foundation of a faith that can alone  
 secure progress. The interests of the  
 State should never demand injustice  
 to the individual, nor any restriction  
 of freedom save where it is used  
 for active interference with other  
 freedom - justice and freedom are  
 the true interests of the State.

Fear and suspicion poison the  
 well-springs of the people - their  
 absence from the atmosphere is the  
 test of whether the State is fitted  
 to fulfil its end. One aware of the  
 essential elements of our tradition,  
 we betray it if we commit or condone  
 a breach of them within our own  
 land. In upholding them against  
 external threats we have a cause  
 worth defence, and sacrifice. It

indulgence  
 love this  
 also money

p. 8  
 N. V. K.  
 does this



offer a common rallying ground  
for all parties, and classes. For here  
patriotism and pacifism are com-  
bined in a positive form - and  
faith."

[ All this admits the weakness of  
militarism & lack of idealism in the  
present order. An opportunity for  
pacifists to step in & supply the ideal  
& program for it.

Since N.Y.S. will develop gradually  
in industrial disputes in the nation, thus  
the majority will <sup>to</sup> its inhabitants get the discipline  
the higher collective morale can be  
attained because one mode of dis-  
cipline is technically more effective  
than <sup>+ philosophically is self-consistent</sup> the military discipline. More  
consistent & because more idealistic it enlists  
the will more completely, deeply & endur-



grow in strength, provided that the  
pacifists get busy to in action &  
discipline beforehand. See my later  
memo on an offer by pacifists to the  
govt. [ Make this into an article  
for Dick Sheppard. ]

p. 88.

"Soldiers of today are predominantly  
concerned with the problem of attack,  
no dubious of solution. They might  
wisely spare a little time to study  
the possibilities of a form of action  
which would throw the burden  
of that problem on the enemy,  
I refer to what I would term the  
'baited offensive', the combination  
of offensive strategy with defensive  
tactics. Throughout history it  
has proved one of the most  
effective of moves, and its ad-



advantages have increased as modern  
 weapons have handicapped other types  
 of move. By rapidity of advance  
 and mobility of manoeuvre, you may  
 be able to seize points which the  
 enemy, sensitive to the threat, will  
 be constrained to attack. Thus you  
 will invite him to a repulse which  
 in turn may be exploited by a  
 counter-attack. Such a counterstroke, against  
 an exhausted attacker, is much less  
 difficult than the attack on a  
 defended position. The opportunity  
 for it may also be created by a  
 calculated withdrawal - what one  
 may call the 'luring defensive'.  
 Here is another gambit of future war-  
 fare.

"Whatever form of action be

adopted, its effectiveness will depend  
on concealment of intention. The  
mystification of the opponent acts  
upon him like a paralyzing drug.  
The most method of producing  
it, as centuries of experience have  
shown, is that of wide extension.  
~~It~~ ... In skilled hands its risks are  
far outweighed by its advantages.  
By operating on a wide front, one  
thickens the fog of war for one's  
opponent yet minimizes it for  
oneself. It is a psychological  
smoke-screen which disturbs  
the mind and may shake the  
nerve of the stoutest adversary.  
Under cover of it, one has the  
best chance of seeing points of  
leverage. ...

"There have been some instances in recent experience of a tendency toward movement on wider fronts, but it has not gone nearly far enough for its promise to mature. The greatest hindrance is the dogma of 'concentration', imperfectly understood. It is not easy for the simple mind to grasp that concentration is in essence a matter of effect and not of form. ~~The adaptation~~ - - - -

90

Today we must recognize the need for reviving the distributed strategic approach, if there is to be any chance of reviving the art and effect of strategy. But two new conditions - air power and motor power - seem to point to its further development into a dispersed strategic approach. The



danger of an attack, the aim of  
mystification, and the need of  
drawing full value from mechan-  
ized mobility, suggest that advance-  
ing forces should not only be  
distributed as widely as possible  
is compatible with combined  
action, but be dispersed as much  
as is compatible with cohesion,  
and the development of mobility is a  
timely aid toward increasing  
dispersion with control.

[Of the moral analogies &  
the forefront of M.V.C. in all the  
above. Common understanding takes  
place of wireless information. By  
distribution he means the army  
moving in independent fractions.  
By dispersion he means <sup>a spread</sup> in particular,

to diminish the effect of fire.]

p. 219. -- "As with aircraft themselves, the influence of anti-aircraft armament may be even more moral than material. And it is none the less important in consequence. If it was true in Napoleon's day that the moral was to the material as three to one, a study of modern war conditions suggests that the ratio now may be at least six to one. The moral effect of anti-aircraft guns works two ways: first, by the nerve-strain and disturbance it causes to the enemy pilots; second, by the comfort it brings to the population of the area which is threatened by air attack. One of my strongest impressions of the war is the difference of tone in certain districts before and after

anti-aircraft guns were provided, even though these guns were not equipped with instruments that promised more than a fluke-chance of hitting the attackers overhead. Until a few guns were sent there were serious signs of a moral breakdown. The feeling of being able to hit back is an invaluable relief from tension. This is likely to apply more than ever to the critical opening days of a future war. And the chances of being able to hit back with effect seem, on the whole, to be improving - in the light of such actual experience as the recent Abyssinian and Spanish wars have yielded.



### Totalitarian War

"It is manifest that many soldiers are contemplating a vast expansion of the Army and its fulfilment by conscription, in the event of another war. That is a natural view on their part, although there is cause for doubt whether the technical trend of modern warfare as a whole is compatible with the effective use of large numbers. But, apart from this issue, they naturally desire the most powerful Army that can be provided by the country.

"It is the statesman's responsibility to take both a wider and a longer view. He has to determine how far the maximum effort in one sphere can be reconciled with the needs of other spheres. He has also to look

The whole population will be conscripted for moral control during

beyond the military victory, and to ensure that the steps taken for these purposes do not overstrain the fabric of the nation nor damage its future - so far as a wise economy of effort can avoid these risks.

"The true aim of a nation in war is to quench the enemy nation's will to war with the least possible material and spiritual loss to itself. That is a modification, which has hitherto proved practical in our own history, of the Clausewitzian dogma of 'absolute' war. ....

221

"For centuries Britain successfully conducted her wars on a limited basis, on land at least, whereas all her adversaries who pursued an unlimited policy ruined themselves. Experience

showed that to seek predominance both on land and sea overdrained the Power which attempted it. How much more probable is such a consequence when the effort has to be spread over land, sea, and air. True concentration and economy of force lies in conserving effort when we can. -----

"The older British tradition represents a theory proved by three centuries of practice. With it, too, is linked the British tradition of individual freedom, our most precious heritage, which will be immediately endangered if we accept the new foreign theory of totalitarian preparation for war. It would be the supreme irony of our history if we sacrificed this ~~theory~~ freedom in the process of preparing to defend it. It



would be like committing suicide to  
escape a fear."

[ But focuses stagnation + stalemate on  
land + sea, & mobility only in the air ]

300

-- "With the growth of social and  
industrial organization, economic tar-  
gets have proportionately outgrown  
military targets, and they have  
become more sensitive as the latter  
have become less vulnerable. The  
complex web of a nation's commerce  
and industry, its administration  
and supply, can be easily torn.

--- "Military wisdom now lies, not  
in amassing armies, but in dis-  
minishing national vulnerability.

The very industry that augments a  
nation's strength for military action  
may produce a counter balancing

degree of vulnerability. And the centralization of industry may counteract the growth of industry from a military point of view. Every means of reducing and dispersing targets and also of decreasing their sensitivity, should be studied and sought. The preparedness of the people is no less important. As safeguards against air attack, for example, education and understanding count at least as much as concrete measures for the provision of anti-aircraft weapons and shelters. A sturdy individualism based on a regime of reason and freedom, so long as it does not lapse into inertia, may withstand the shocks better than the emotionalism lived by totalitarianism, with

its influence on mass psychology and  
immanent appeal to mass sentiment.  
The self-reliant individual, capable of  
thinking for himself, has a better  
chance of adaptation to the unexpected.  
And the one certainty about modern  
war is that it is more uncertain  
than it ever was." - - -

18

"The more one reflects on the involved  
problems of modern warfare, the more  
importance seems to attach to the  
factor of 'vulnerability' - the relative  
vulnerability of the different coun-  
tries - in any comparison of strengths.

"This in turn has a bearing upon  
the researches for technical surprise  
which is now being so actively pur-  
sued. Those who contemplate taking  
the offensive in any future Euro-



year was we impelled to seek a new  
 master-key both by the certainties  
 and the uncertainties of the problem.  
 They are forced to recognize that the  
 methods of the last war will not suffice;  
 that nothing but a protracted struggle  
 and an inconclusive result can be  
 expected from the use of armies equipped  
 with the weapons of 1918 merely improved.  
 They fear that such a prolongation of  
 the issue may produce developments  
 that cannot be foreseen, causing a  
 rapid shifting of the balance. The  
 combination of these thoughts is an  
 urge to the search for quick results.  
 In 1914, the military chiefs hoped to  
 decide the issue within a few weeks,  
 and bent their efforts towards this object.  
 That was short enough - and much

shorter than the event, after their  
plans had miscarried. Now, they  
are coming to the view that the first  
few days, or even hours, may be ~~critical~~  
crucial, and to see that unless they  
can obtain a decisive advantage  
within this brief time it may be  
unattainable on any calculable basis.  
Hence their eagerness to find new  
weapons that may overcome defence  
without great delays. "

(continued in next note book, XXX)

Perhaps example & demonstration is  
the only way of appealing to the  
masses on R.V.R., to follow out  
Roger Baldwin's objection. Study  
Gandhi for this.

If one is to follow Jesus' advice to rich young man, to sell all his goods & give to the poor, i.e. voluntary poverty, - it means that one must learn a manual trade (first). Did Jesus learn carpentry for that reason, or was he a carpenter from original cc. necessity? What was people's trade? Connect this with Buddha's injunction as to the right way of living - one of 8 truths.

The price of freedom is not merely eternal vigilance but also the <sup>active practice of</sup> virtues such as love, kindness, honesty, free self-criticism, tolerance, humility, courage, unity etc. Cf. "The Song Road" & Hughes' speech at Brown U. Gandhi & my pamphlet & even a small committee as the way to get it & keep it. Friendly admissions. These virtues exist everywhere.



They must be stimulated, and not  
hampered & smothered by such  
stimuli & environments as modern  
money and private landlordism.

---

Probably money and private land-  
lordism are the two chief forces  
which thwart and kill the  
'idealism' of young people, especially  
as they ~~deeds~~ take on "responsibilities"  
of families, business, etc. of the  
questionnaire of different age groups.

---

Voluntary simplification & volun-  
tary poverty are the proofs of  
moral courage, <sup>on the part of paupers</sup> equivalent to the  
physical bravery of soldiers. Just as  
~~courage is~~ physical courage is a  
result of ~~a~~ unselfish, total devotion to

others or ~~a~~ self-forgetful deep interest-affection in people or the solution of a (human) problem, moral courage and this ~~proof or release or~~ giving up of ordinary vanities, hardened by vol. poverty are a result of similar <sup>unselfish</sup> devotion. It is a visible and convincing proof.

But <sup>while</sup> ~~not~~ all soldiers are ready for front line service, not all have to go. But all give undeniable proof of their devotion, especially in these days of corruption. But so not all pacifists will have to go out for vol. poverty, yet all must give the preliminary proof of vol. simplicity and of devotion of considerable time one way or another to the cause of community.

Govt may well demand some such

proof before it gives exemption  
from military service.

---

I think the ruling classes of all  
countries, or the intelligent members  
of them, realize that war will  
probably destroy civilization & im-  
prove everyone including them-  
selves. But they are determined  
to preserve their relative position  
of power nevertheless. Perhaps  
some of them feel that they wish  
to retain war because it is the  
only way by which they can retain  
their control, by maintaining fear  
among the populace at large. This  
is not evidence of great wickedness,  
for all men care more for the means  
& mode of their lives than for the



life itself. They will all fight to  
 preserve their status & means of  
 existence, strikes among manual workers.  
 Also all men desire power.

---

Siddell Hart's admission of the  
 weakness of militant and imperialist  
 ideals is very interesting. His emphasis  
 on need for freedom is lame. He  
 should realize that it is impossible  
 under militarism.

---

Understanding of money & ship would  
 help people to get the right idea about  
 what constitutes security, and thus  
 make easier the abandonment by people  
 to go & work in a group. Also would  
 help to clarify the idea of one's  
 position in society.

By having scrip which has longer terms of validity than one week, is in only large denominations and has money worthy stamps to affix, we could cover the medium of exchange for big undertakings. Delegate it with checks. Maybe have checks valid only for certain periods and in ratio to their size.

---

Crisis = opportunity.

---

The smash-up of communications & RR's in a war will so dislocate supplies of food & other things that life will be lost. ∴ Rely on RR etc in preferably mountain regions to carry on civilization.

---

If most the manual workers are economic concepts in the ec. war, it is necessary to do ec. conscientious objection. To refuse ec. war service thus requires K, hard shoemaking, understanding of money, use of veg. small community, intensive farming, hard labor.

Knitting, spinning & weaving are probably not just temporary means of stopping economic warfare until we can reform money, land owning, etc. Probably they should always continue for training purposes, because of the muscle-nerve connection.

I instead of money interest we will have to develop community & mutual aid.



*New Republic*  
*June 9, 1937.*

Madariaga leans toward fascism in his practical proposals, and leans away from democracy, except in verbal usage, his book dates itself as belonging not to the future, but to a very dead part of the recent past. For by now the weaknesses of fascism, far more serious than those of democracy, are apparent even in the jumpy apprehensiveness of the fascists; while for the rest of the world fascism has become a joke: a rancid joke, no doubt, but a subject for amusement rather than respect, an example to be avoided, not emulated. In no place does Madariaga display more pathetically his lack of scientific realism than in his respectful references to the fascist system—above all, in his stultifying adoption of the principle of unanimity. Real political communities are diverse and many-centered; real political life is an adjustment of conflicts and tensions and coöperations. Any fool can govern by martial law; but only a fool would mistake such a process for government.

At its sordid, ineffectual worst, under parliamentary representation and modern finance capitalism, democracy has at least one residual virtue that all the fascist and authoritarian forms of government have cut themselves off from: the capacity for self-criticism. Ultimately this means the capacity to take a joke, and to see problems of power in their immediate, human terms. The structure of modern democracy as a whole shows great weaknesses, some inherited from the dynastic state, some the result of abstract, legalistic theories of public power; its principle of association is not based upon economic and regional realities; there is a failure of balance in both territorial and economic power; and the organization of political affairs by vague parties places a premium on laziness and irresponsibility that the ambitious are quick to seize for their own advantage; the state itself is a mere patchwork of political and economic forces over which the army, the bureaucracy and the central banks exercise a quiet but decisive power. But in a democracy the component elements of the community are nevertheless still alive: the universities, the press, the trade unions, even the churches, far more than the formal organs of political government, give weight and body to the social processes, and keep the community from that colorless unanimity which characterizes fascism. Under fascism, on the other hand, the main structure of the State presents an imposing façade of centralized unity and power; but unfortunately all the parts are paralyzed or dead—exterminated by the dictatorship in the very act of seizing power or attempting to make it secure.

So long as democracies remain democracies, they have the means of transcending their weaknesses, now in small measures, now in large constitutional changes; the government may fall a dozen times, but the active sources of government are not thereby imperiled: all the eggs are not in one basket—or one might even say, thinking of fascism, all the bad eggs are not in one basket. With fascist dictatorships, on the other hand, an all-or-nothing psychology prevails. They must keep themselves in a state of coercive rigidity; and this deprives them of one of the main attributes of life: the power of adaptation. The strength of democracy is in its parts: what seems like looseness and anarchy is an additional guarantee of survival in a tight place; whereas fascism depends upon the paralyzing effect of a single personality, who tends to become, like Napoleon I, the victim of his own self-deification. Hence fascism must always face the dangerous alternative of "cracking down" or cracking up. It cannot even risk a smile or an inopportune whisper. As a system of government, it lacks human dimensions.

The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the laws of quantum mechanics are based on the principle of the conservation of energy.

The second part of the paper is devoted to a discussion of the experimental results of the study of the structure of the atom. It is shown that the experimental results are in good agreement with the theoretical predictions of the theory of the structure of the atom.

The third part of the paper is devoted to a discussion of the applications of the theory of the structure of the atom. It is shown that the theory of the structure of the atom has many important applications in the field of physics and chemistry.

The fourth part of the paper is devoted to a discussion of the future of the theory of the structure of the atom. It is shown that the theory of the structure of the atom is still in the early stages of development, and that there are many important problems that need to be solved.

The fifth part of the paper is devoted to a discussion of the conclusions of the study. It is shown that the study has shown that the theory of the structure of the atom is a very important and interesting field of research, and that it has many important applications in the field of physics and chemistry.

# Contents

Money. 39, 41, 52, 58, 61, 69, 73, 76, 79, 80, 86, 87, 89, 101, 118, 119,  
120, 124, 125, 143, 144, 146, 147, 151, 156, 159, 192, 195, 196, 197,

Answers to criticisms on NVR. 48, 56, 68, 75, 99, 190

Instances of NVR. 48, 160,

Justs what did pacifists do if war comes? 100, 192, 131-133, 127, 136

Re going to India 144, 153, 191, 138+,

Emotions 50, 52, 63, 127, 132,

Criticisms of NVR. 46, 47, 48, 56, 64+, 75, 97, 174, 170,

Meditation

Imagination. 71

Voluntary poverty & simplicity 192

Reasons for optimism for NVR 145, 164-171

Sadhana 53, 115, 145,  
Satyagraha



Sits 52,

art 140,

Beautiful proportion 140,

Fanning 142

, 03,



Recommended by Hogben - Mann's "Practical Mathematics"  
p. 3 Bell's "Search for Truth"

Books recommended on radio talks, "The Spiritual Life" - Evelyn  
p. 53 Underhill

List sent by Gerald Heard  
p. 151

"I Knew Them in Prison" - Mary B. Harris  
p. 160



"Mathematics for the Million" - Lancelot Hogben  
pp. 4-40

Encycl. of Religious Ethics: "Shame is an emotion of self-abasement..  
p. 42

"The Spiritual Life" - Evelyn Underhill  
pp. 62-3

"Emotions and Bodily Changes" - H. Flanders Dunbar  
pp. 67-8

"The Identity Theory" - Blaney Stevens  
p. 48

"Crisis and Criticism" - Alick West  
pp. 87-97

"Scepticism and Poetry" - D.G. James  
pp. 101-118

"An Introduction to Pacifism" - Philip Mumford  
pp. 120-123

"Nature of Human Conflicts" - Luria  
pp. 123-135 (as much comment as quote)

"On Growth and Form" - D'Arcy Wentworth Thompson  
pp. 141-143

"Europe in Arms" - B.H. Liddell Hart  
pp. 160-190, 195

Article from New Republic signed by Lewis Mumford  
p. 198

"Social and Cultural Dynamics" - P.A. Sorokin  
p. 1

Book titled noted

(over)



